6.11 TRAFFIC AND TRANSPORTATION

This section presents an evaluation of the existing traffic and transportation systems in the vicinity of the Morro Bay Power Plant (MBPP) and the potential effects of the Project on these systems. Because MBPP is an existing industrial facility that has been in operation since the 1950s, traffic patterns to and from the site have been long established. Upon completion of the Project, no new permanent MBPP employees will be added and existing preconstruction employee traffic patterns associated with MBPP will remain unchanged. No increase in the volume of truck transport will be required for the operation of the Project either, so the preconstruction truck transport patterns will remain unchanged during the long-term operation of the Project.

Construction activities for the Project will occur in three distinct stages that will each produce different traffic conditions. Figure 6.11-1 shows work force levels for each stage. Table 6.11-1 below provides key information for each stage.

TABLE 6.11-1

PROJECT CONSTRUCTION STAGE SUMMARY

	STAGE I	STAGE II	STAGE III
Duration	3 Months	21 Months	47 Months
Workforce			
- Peak	35 Employees	700 Day Shift 250 Night Shift	100 Employees
- Average	35 Employees	300 Day Shift 100 Night Shift	40 Employees
Truck Transport	10 to 15 Trucks/Day	50 Trucks/Day (Peak) 6 Trucks/Day (Average)	30 Trucks (Peak) 10 to 15 Trucks/Day (Average)

Stage I will be the decommissioning and removal of existing onsite fuel oil tanks from the MBPP site. This stage will last about 3 months. Stage I will require less than 40 onsite construction personnel and an average of 10 to 15 trucks arriving and departing the site each day. Due to this small number of construction personnel and truck transport for this stage and the fact that traffic for this stage is less than normal site maintenance traffic, traffic impacts from Stage I will not have a significant impact on the Morro Bay area.

Stage II will be construction of the new combined cycle units. This stage will last about 21 months. During peak Stage II activities, which will last about 7 months, approximately

700 construction employees will be onsite and a maximum of approximately 50 truck trips in a day will occur for short time periods (approximately 8 to 10 weeks). The intensified activity levels for Stage II have been planned by Duke Energy after discussions with City of Morro Bay residents and local officials expressed a desire to have an accelerated construction schedule for the Project that accepts higher onsite intensity levels in order to reduce the duration of impacts to the area and to realize the important environmental benefits of the Project earlier.

Discussions with Morro Bay High School, the City of Morro Bay and the California Department of Transportation (Caltrans) have resulted in identification of preferred Stage II shift scheduling (to avoid rush hour and local school peak traffic periods) and preferred Stage II access routes to and from MBPP for construction employees and truck transport. In addition, truck transport to the site for Stage II construction will be scheduled to avoid local peak traffic periods (i.e., 8:00 to 9:00 a.m. and 4:00 to 5:00 p.m.) through the use of offsite staging areas and/or agreements with vendors. To the extent uncertainty exists about the ability of any vendor to comply with local traffic time windows, those deliveries will be scheduled after hours (i.e., between 8:00 p.m. and 6:00 a.m.). These recommendations have been added to the Project's circulation design to avoid construction-related impacts to local roads and highways during the Stage II construction activities. As a result of incorporating these design factors into the Project's access and circulation routes, impacts from Stage II traffic conditions will not be significant.

Stage III of the construction activities will be the decommissioning and removal of existing power generation equipment from the MBPP site. This will include removal of the existing power building and the three 450-foot-tall stacks for Units 1 through 4. Stage III activities will last approximately 4 years and will involve an average construction personnel level of about 40 employees with a peak of about 100 for a 6-month period. An average of 10 to 15 delivery trucks will arrive and depart the site each day with occasional peak delivery days of about 30 trucks. Similar to Stage I traffic impacts, this number of construction workers is small and the delivery traffic is limited. As a result, traffic impacts from Stage III will not alter LOSs in the City based on the traffic analysis presented herein and will not be significant..

The Project's access and circulation routes and other measures described above are designed to avoid traffic effects to the central Morro Bay business district and nearby residential areas. Impacts to traffic and transportation resources in Morro Bay from the overall Project will not be significant. The information presented in this section is based on a detailed traffic engineering study prepared by Higgins Associates Civil and Traffic Engineers (see Appendix 6.11-1).

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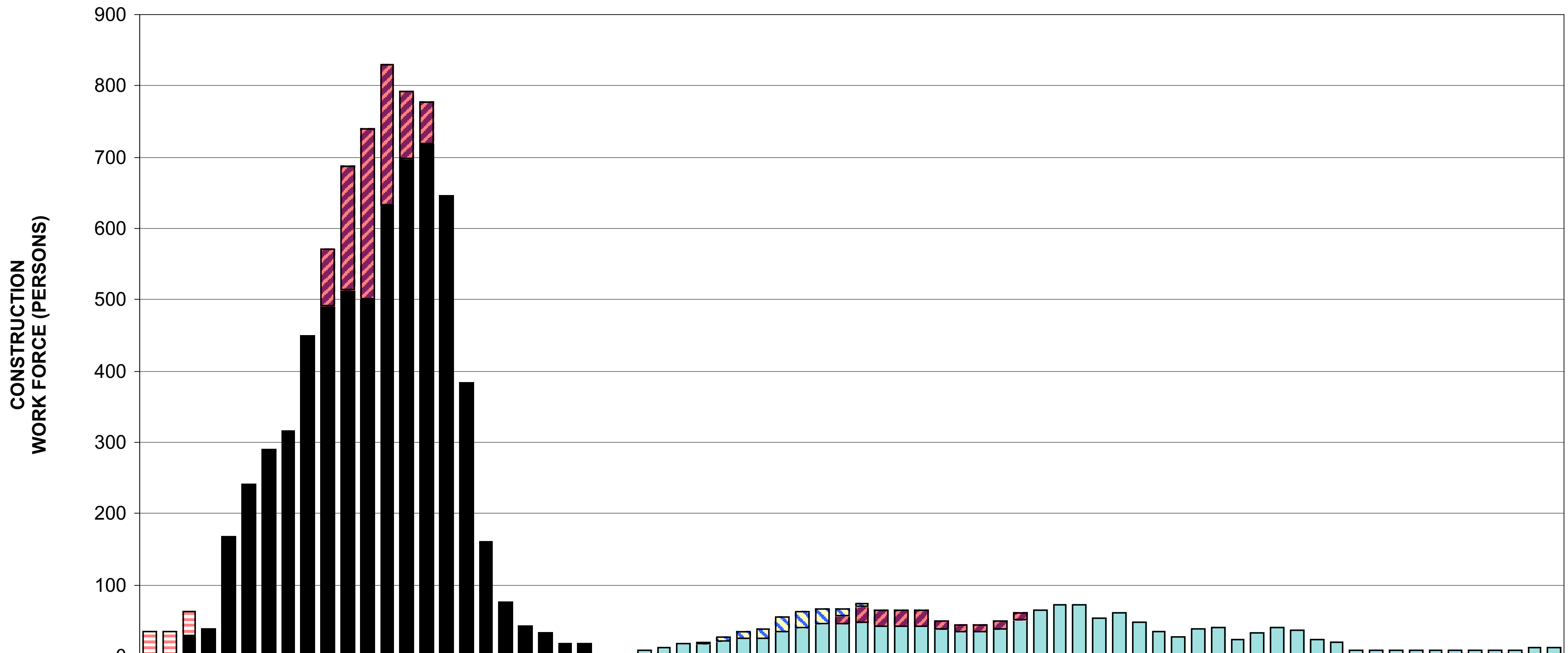

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Onsite Tank Farm Demolition	35	35	35																					
New CC Units 2nd Shift										80	175	240	200	95	60									
New CC Units 1st Shift			29	39	169	242	291	317	450	491	513	501	631	698	718	647	385	161	77	44	34	19	19	0
Pump House																								
Stack Removal Units 1-4																								
Existing Power Building Demolition																								

	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Onsite Tank Farm Demolition																								
New CC Units 2nd Shift																								
New CC Units 1st Shift	0																							
Pump House					4	8	12	16	24	24	24	12	4											
Stack Removal Units 1-4												12	24	24	24	24	12	12	12	12	12			
Existing Power Building Demolition		9	13	18	18	22	26	26	35	42	46	46	48	44	44	44	40	35	35	40	52	66	73	73

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Onsite Tank Farm Demolition																								
New CC Units 2nd Shift																								
New CC Units 1st Shift																								
Pump House																								
Stack Removal Units 1-4																								
Existing Power Building Demolition	55	62	48	35	29	40	42	24	33	42	37	24	20	9	9	9	9	9	9	9	9	9	13	13

STAGE I   STAGE II   STAGE III

LEGEND

- Onsite Tank Farm Demolition
- New CC Units 2nd Shift
- New CC Units 1st Shift
- Pump House
- Stack Removal Units 1-4
- Existing Power Building Demolition

SOURCE: DUKE ENERGY AND DUKE/FLUOR DANIEL, 2000.

WORK FORCE LOADING
PROJECT CONSTRUCTION

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

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FIGURE 6.11-1

Relative to local traffic and transportation systems, beneficial aspects of the Project include:

- Identification of specific construction access routes for construction employees and deliveries to avoid impacts on central Morro Bay or the Embarcadero area.
- Identification of specific shift schedules to allow peak construction employee traffic to avoid rush hour and high activity periods for nearby schools.
- Construction of a new bridge across Morro Creek. The new, bridge will be used for Project construction traffic. Upon completion of Project construction, the new bridge will be available to the City of Morro Bay for use as a pedestrian/bike path with posts installed at both ends of the bridge to prevent vehicle access (these posts will be removable so that access by City emergency services can occur efficiently). On occasion during future operations, the bridge may be used to allow access for special (i.e., large) equipment.
- Support for proposed funding for a traffic officer during the Stage I and II construction periods to assist with traffic management.
- Creation of a transportation management plan that will address:
  - Construction shift scheduling.
  - Access routes for construction employees and deliveries.
  - Scheduling for heavy/oversize deliveries.
  - Encouraging construction employees to use, as feasible, park and ride/rideshare facilities.
  - Traffic control, as necessary, during special City of Morro Bay events.

6.11.1 EXISTING CONDITIONS

6.11.1.1 Plans and Programs

The following plans and programs are applicable to the control of traffic and transportation at the MBPP site:

- City of Morro Bay Circulation Element: The Morro Bay Circulation Element is part of the Morro Bay General Plan (adopted 1988). This document establishes local plans and policies for traffic management in Morro Bay.
- City of Morro Bay Coastal Land Use Plan: Local Coastal Program - The Local Coastal Program (adopted 1982, updated 1995) establishes goals and policies to preserve highway capacity for coastal access and coastal-dependent land uses.

6.11.1.2 Regional Setting

San Luis Obispo County (County) is served by a multimodal transportation system, composed of a highway system, arterial streets, minor roads, local and regional transit services, bicycle and

nonmotorized facilities, rail, maritime and airport facilities, and specialized transportation services. The County regional transportation system is discussed in the following sections.

6.11.1.2.1 Roads and Highways

The MBPP is located 12 miles northwest of San Luis Obispo, California, in San Luis Obispo County, in the City of Morro Bay (see Figure 6.11-2). The plant is situated west of Highway 1, near Morro Bay Harbor and east of Estero Bay (see Figure 6.11-3). The area includes light industry, commercial operations, and marine, residential and recreational uses.

Highway 1 passes through the City of Morro Bay, and is the key north/south highway serving the coastal area. Highway 1 is a scenic route through central California with the portion of Highway 1 north of MBPP extending up through the Cayucos area recently designated by the State of California as a key scenic highway.

Highway 101, which is located about 15 miles east of Morro Bay, offers an alternative north/south route through the County and is a more direct north/south regional passageway, linking the San Francisco Bay Area to the north, with the cities of San Luis Obispo, Santa Barbara and Los Angeles to the south. Highway 101 and Highway 1 actually join together at San Luis Obispo and are a combined route through the Santa Barbara/Carpenteria area, where they split again, allowing Highway 1 to continue as a coastal scenic route near the coast and Highway 101 to continue further inland.

Two key County roads serve as connectors between Highway 101 and Highway 1. State Route 41, also known as Atascadero Road within Morro Bay City limits, branches from Highway 1 near the Cuesta hillside residences and winds its way east through the hills to Highway 101 at the City of Atascadero. State Route 46 branches from Highway 1 north of Morro Bay, near the city of Cambria and extends east to Highway 101 near the cities of Templeton and Paso Robles.

6.11.1.2.2 Rail Service

New passenger rail services became available in the County in late October of 1995 with the extension of the San Diegan train from Santa Barbara using Union Pacific/Southern Pacific (UP/SP) Coast Line track systems. This train provides service to points south of San Luis Obispo to its southernmost terminal in San Diego. Amtrak now provides direct services from three station stops in the County - Grover Beach, San Luis Obispo, and Paso Robles, to Seattle, Washington

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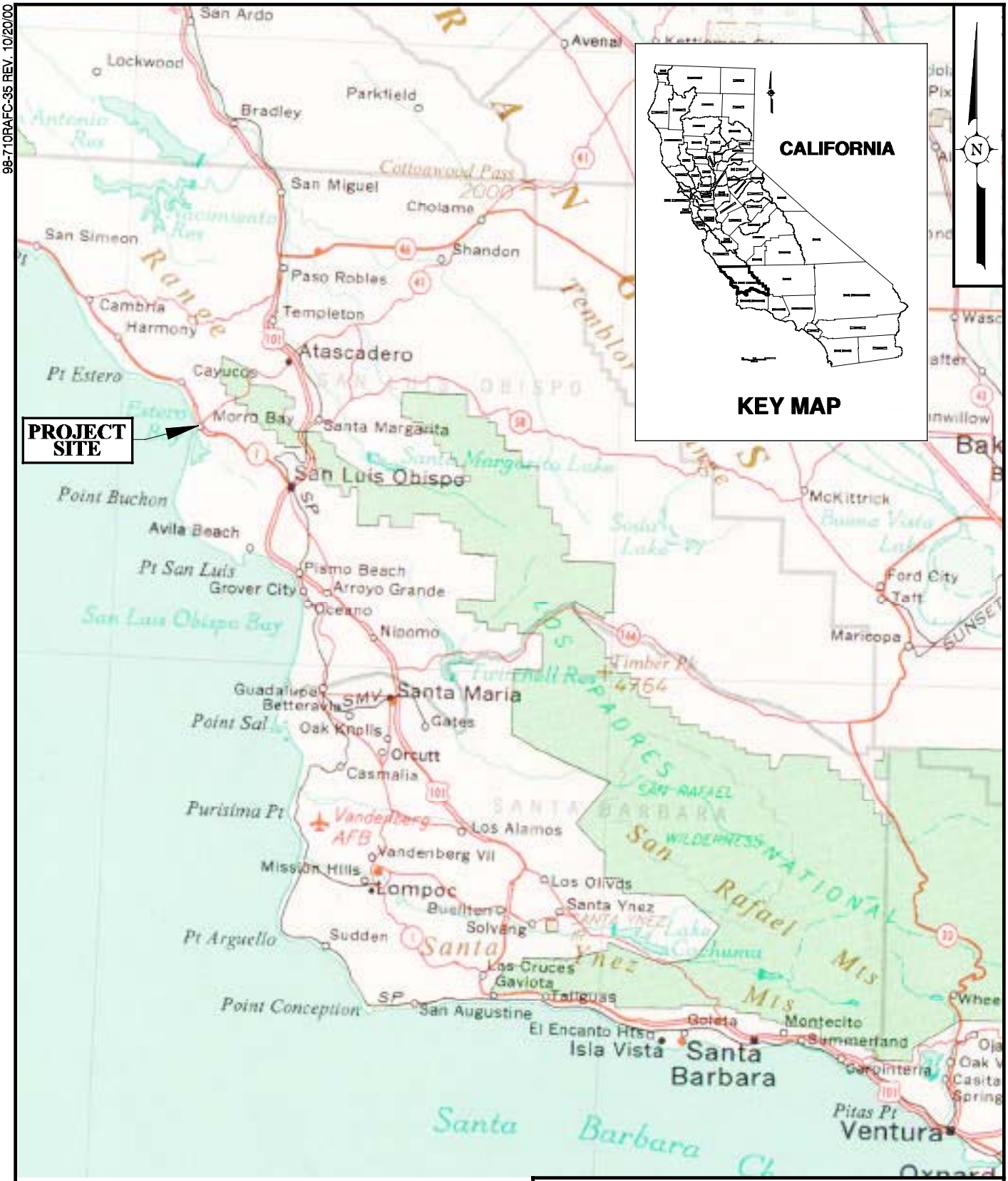

REFERENCE: USGS NATIONAL ATLAS SOUTHERN CALIFORNIA MAP, 1973.

REGIONAL MAP

DUKE ENERGY MORRO BAY LLC
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FIGURE 6.11-2

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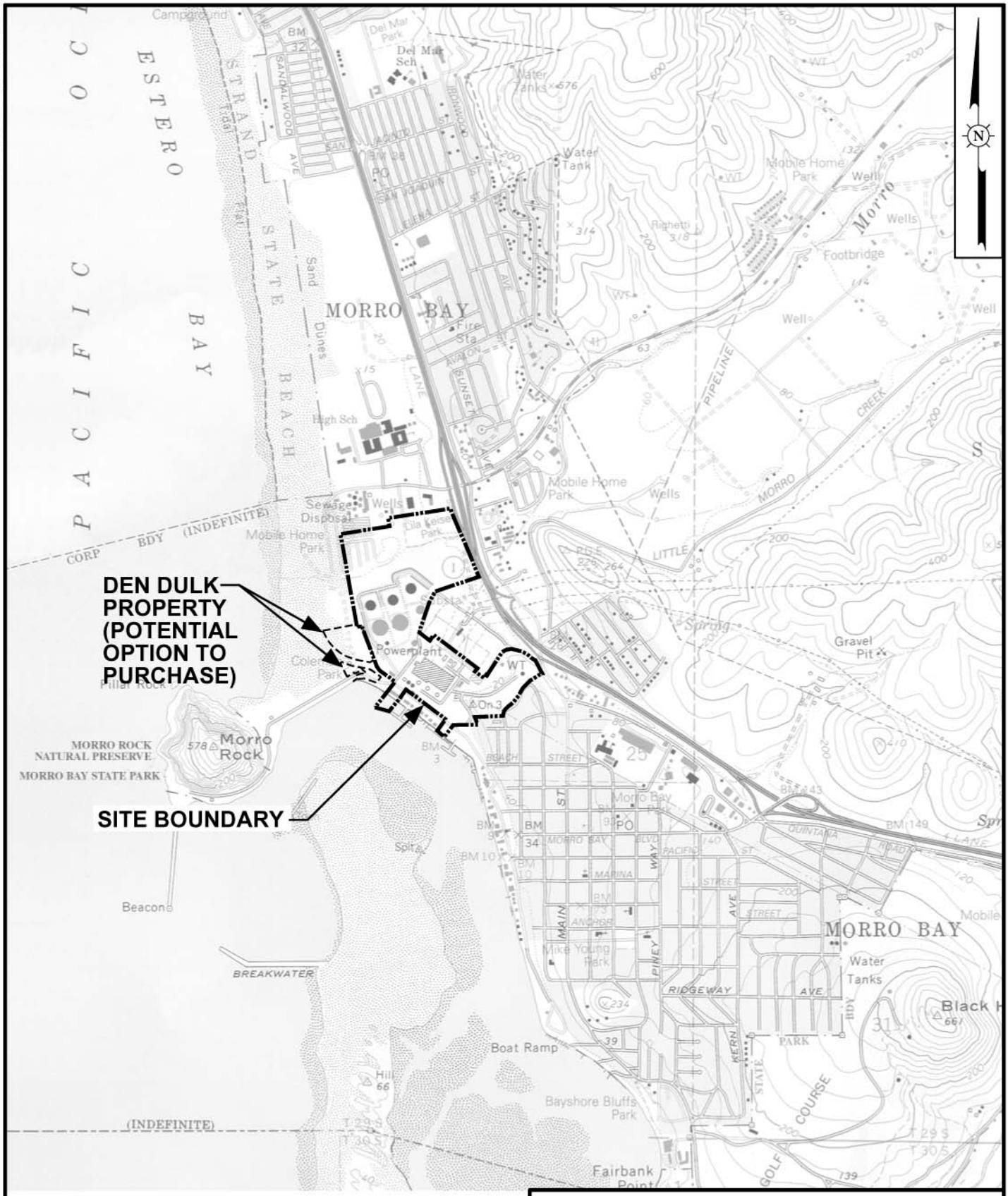

SOURCES: USGS 7.5 MINUTE TOPOGRAPHIC MAP OF MORRO BAY NORTH AND MORRO BAY SOUTH, CALIFORNIA DATED 1993 AND 1994.

MORRO BAY AREA MAP

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-3

(via the Coast Starlight), to Los Angeles (via the Coast Starlight and the San Diegan), and to San Diego (via the San Diegan). An average of about 10,000 passengers use this line each month. Freight service to the region is provided by UP/SP using the same coastline track system. Freight rail volumes are low, averaging only a few trips per month (Wilburn, 1999).

6.11.1.2.3 Air Service

The San Luis Obispo region contains three public airports: the San Luis Obispo County Airport (McChesney Field), the Oceano Airport, and the Paso Robles Municipal Airport. Of these, only the San Luis Obispo County Airport maintains regularly scheduled commercial commuter service; Oceano Airport and Paso Robles Airport are primarily used for general aviation purposes.

At the San Luis Obispo County Airport, there were 110,000 take-offs and landings (commercial carrier operations and noncommercial general aviation operations) in 1996. According to the Year End Summary Report, a total of 22,332 carrier operations (take-offs and landings) occurred in 1996. Commercial operations were down 14 percent (3,670) from the high of 26,000 in 1993. Currently, San Luis Obispo is served by three commercial airlines: American Eagle, Sky West/United and America West Express.

An estimated 30,000 total operations (take-offs and landings) occurred at the Paso Robles Municipal Airport in 1996. Of these, approximately 2,000 involved military aircraft, and there were an estimated 2,000 commercial enplanements (charters-air taxis). The California Department of Forestry operates air attack for forest fires from this airport, and the California Highway Patrol use this facility as a base for their speed enforcement aircraft. Other major activities include: air shows and fly-ins, parachute jumping, and ultralights.

Oceano Airport is operated under contract by private individuals. The Oceano Airport is not under the purview of the Federal Aviation Administration and that agency does not track the airport's operations. Oceano Airport now offers a variety of air transportation and exhibition events such as hot-air ballooning.

6.11.1.2.4 Transit

In 1996, multiple transit systems were in operation in the San Luis Obispo region serving a variety of needs. The following are fixed-route transit services that operate in the San Luis Obispo region: Central Coast Area Transit (CCAT), serving the entire Region; South County Area Transit (SCAT),

serving the Five-Cities Area; San Luis Obispo (SLO) Transit, serving the city of San Luis Obispo and, most recently created, Paso Robles Community Area Transit Service (PR CATS). There are also several demand-responsive transit systems in operation, these include: Runabout, serving the entire Region; Atascadero Dial-A-Ride; Morro Bay Dial-A-Ride; South Bay Dial-A-Ride, serving Los Osos and Baywood Park; Paso Robles Dial-A-Ride; Arroyo Grande Subsidized Taxi; Pismo Beach Subsidized Taxi; and, Grover Beach Subsidized Taxi. The San Luis Obispo Regional Transit Authority (SLORTA) operates CCAT and Runabout. Historically, Cal Poly and Cuesta College students have been major transit users.

The Regional Rideshare Office is dedicated to reducing the number of single-occupant vehicles on County road and highways through free ridematching, free employer outreach and assisting individuals with public transit information. The Regional Rideshare Office holds two annual events to promote alternative transportation; Rideshare Week, a week-long event encouraging individuals to try out various alternative modes of transportation; and Bike Fest, an event designed to promote bike safety and information. The Regional Rideshare Office is a division of SLORTA and is funded through federal funds provided by Caltrans, local transportation sales tax money provided by the San Luis Obispo Council of Governments, and, for the 1996-97 fiscal year, vehicle registration fee funds provided by the County Air Pollution Control District.

6.11.1.3 Local Setting

The MBPP is situated at the north end of the commercial district of the Embarcadero in the City of Morro Bay (see Figure 6.11-3). Primary site access is from Embarcadero Road approximately across from the United States Coast Guard Office. Current MBPP employee and delivery traffic use this Embarcadero entrance for access to the facility. The Embarcadero MBPP entrance is gated and is only open during normal MBPP business hours (7:00 a.m. to 5:00 p.m.), with access controlled by a security guard.

A secondary entrance road and site access to MBPP is located on Main Street behind the power plant, west of Highway 1. This secondary site entrance is owned by the Pacific Gas and Electric Company (PG&E), though an agreement between Duke Energy and PG&E provides for joint usage. The secondary entrance is gated, rarely used and does not currently serve as a normal access route for employees or deliveries. Historically, this entrance, often referred to as the "back" entrance, has been used for special delivery traffic that cannot practically be taken through City streets to the Embarcadero and to the primary MBPP site entrance. These types of deliveries consisted primarily of heavy or oversized equipment.

As Morro Bay is both a tourist town and a quiet beach community, transportation features of the city include pedestrians, bicycle, vehicular, harbor related uses and other transportation such as transit facilities. Each type of use is discussed separately below. No direct rail service exists for the City at Morro Bay, though a brief mention is provided below for completeness. A discussion of pipelines and transmission lines is also provided for completeness.

6.11.1.3.1 MBPP Operations

The MBPP employs 77 persons. The largest number of employees work the day shift with a small number divided between the remaining two shifts. The MBPP operates 7 days a week 24 hours a day. These operations include truck deliveries and departures of packages, materials and equipment. As with any operating power plant, routine maintenance occurs on a frequent basis with larger overhauls or upgrades every couple of years. The maintenance activity occurs on a regular basis, as needed, and includes smaller projects with a team of 30 to 100 workers and truck transport activity of about 5 trucks a day. Major overhauls and equipment upgrades occur every 2 to 3 years and last about 60 to 90 days. Typical overhauls include 200 to 300 additional personnel and truck transport activity of about 10 trucks a day. Maintenance activities are not limited to day shifts. These activities can occur 24 hours a day, seven days a week. The most recent major overhaul occurred in the spring 2000. Field observations by TRC and Higgins personnel of street impacts from this major overhauls indicated that impacts were minimal.

6.11.1.3.2 Pedestrians

Morro Bay's circulation system has been designed primarily to accommodate the automobile. For example, while portions of Morro Bay Boulevard have very wide sidewalks, other parts of the City have either narrow sidewalks or none at all. The frequently crowded Embarcadero has sidewalks as narrow as 4 feet. Many older residential neighborhoods have no sidewalks; however, most streets within low-density residential areas have little vehicular traffic and sidewalks probably are not necessary.

There are currently a number of pedestrian facilities in Morro Bay. These include stairways along the bluff separating the downtown and residential areas from Embarcadero, the public piers along Embarcadero, and the pedestrian facilities in the new Del Mar Park. Morro Bay projects that involve pedestrian recreational activities will expand greatly in the future.

6.11.1.3.3 Bicycle Transportation

Figure 6.11-4 shows the system of bicycle pathways in Morro Bay. In some parts of the City of Morro Bay, the hilly terrain and narrow streets may restrict bikeways within those areas, but connections from major bike origins and destinations are still possible. Note that a recently constructed bicycle pathway and bridge across Morro Creek is located immediately behind MBPP adjacent to Highway 1. The new pathway begins near the PG&E secondary access road and "back" entrance and continues across Duke property to the recreation areas across from the high school on Atascadero Road.

6.11.1.3.4 Vehicular Transportation

Vehicular travel in Morro Bay historically has been concentrated on two streets, Morro Bay Boulevard and Main Street. In the older, central area of the city, businesses are focused along those two streets, in a strip development pattern. That historical commercial office and retail building development pattern tended to concentrate more traffic on these two major arteries and caused some inefficiency in access and circulation.

The current street system was the result of subdivisions created many years ago as well as by state highway designs prepared by Caltrans for Highways 1 and 41. The present Highway 1 was constructed during the 1950s. It was designed as a freeway south of the intersection with Highway 41 and as a divided highway north of Highway 41. Since much of the City's circulation system was already developed at the time of construction of Highway 1, some existing streets were severed and a frontage road (Main Street) was created. Separation between Highway 1 and the frontage road was kept to the absolute minimum. The northern intersecting streets, Yerba Buena Street, Orcas Street, Easter Street and San Jacinto Street were not provided with grade-separated access across the highway.

Most of the street system is a rectangular grid. In some cases, there is no clear hierarchy of streets, resulting in the spreading of traffic onto more of the local streets rather than concentrating traffic on collector streets. However, a few streets have historically been major links between primary origins and destinations. Examples of such streets are San Jacinto Avenue, Ironwood Avenue, Kern Avenue, Piney Way and Kennedy Way. These streets serve as local collectors, funneling traffic to the major arterials, and serving the local community.

The majority of traffic in Morro Bay is handled by a few arterials. The balance of the network has relatively light traffic. Through-traffic is concentrated primarily on Highway 1 and

Atascadero Road - Highway 41, as well as on Morro Bay Boulevard and Main Street. Local traffic utilizes Quintana Road for access to shopping areas as well as the streets mentioned above.

Embarcadero and Beach Street provide major access for visitors and local residents to the tourists commercial and marine uses along the harbor. South Bay Boulevard and State Park Road provide access to and from the Los Osos area.

Peak morning hour and afternoon traffic volumes on key local streets are shown in Figures 6.11-5, 6.11-6 and 6.11-7. Table 6.11-2 also shows levels of service and accident rates for these existing roads, including Highway 1. Main Street and Morro Bay Boulevard have significantly higher traffic volumes than the other arterials. One section of Main Street, south of Highway 1, has traffic volumes over 16,000 vehicles per day. Morro Bay Boulevard handles over 12,000 vehicles per day near its intersection with Quintana Road. Since these streets are only two lanes, their traffic density is even higher than that for Highway 1, which has four lanes.

Most other local streets carry relatively light traffic. These local streets also do not experience the seasonal fluctuations experienced by arterial routes used for access to visitor-serving and recreational areas. Late night traffic on Morro Bay streets drops dramatically and is very light.

Traffic on the local streets is well within the capacities for those streets. California Vehicle Code Section 35550 governs weight and load limitations for local streets, as well as Highway 1.

6.11.1.3.5 Rail Service

No direct rail access to MBPP is available. The closest rail access is by way of San Luis Obispo.

6.11.1.3.6 Pipelines and Transmission Lines

In addition to the various transportation systems for the movement of goods and people, Morro Bay also has a network of pipelines and utility transmission lines used to move water, sewage, storm drainage, fuels, electric power and communication.

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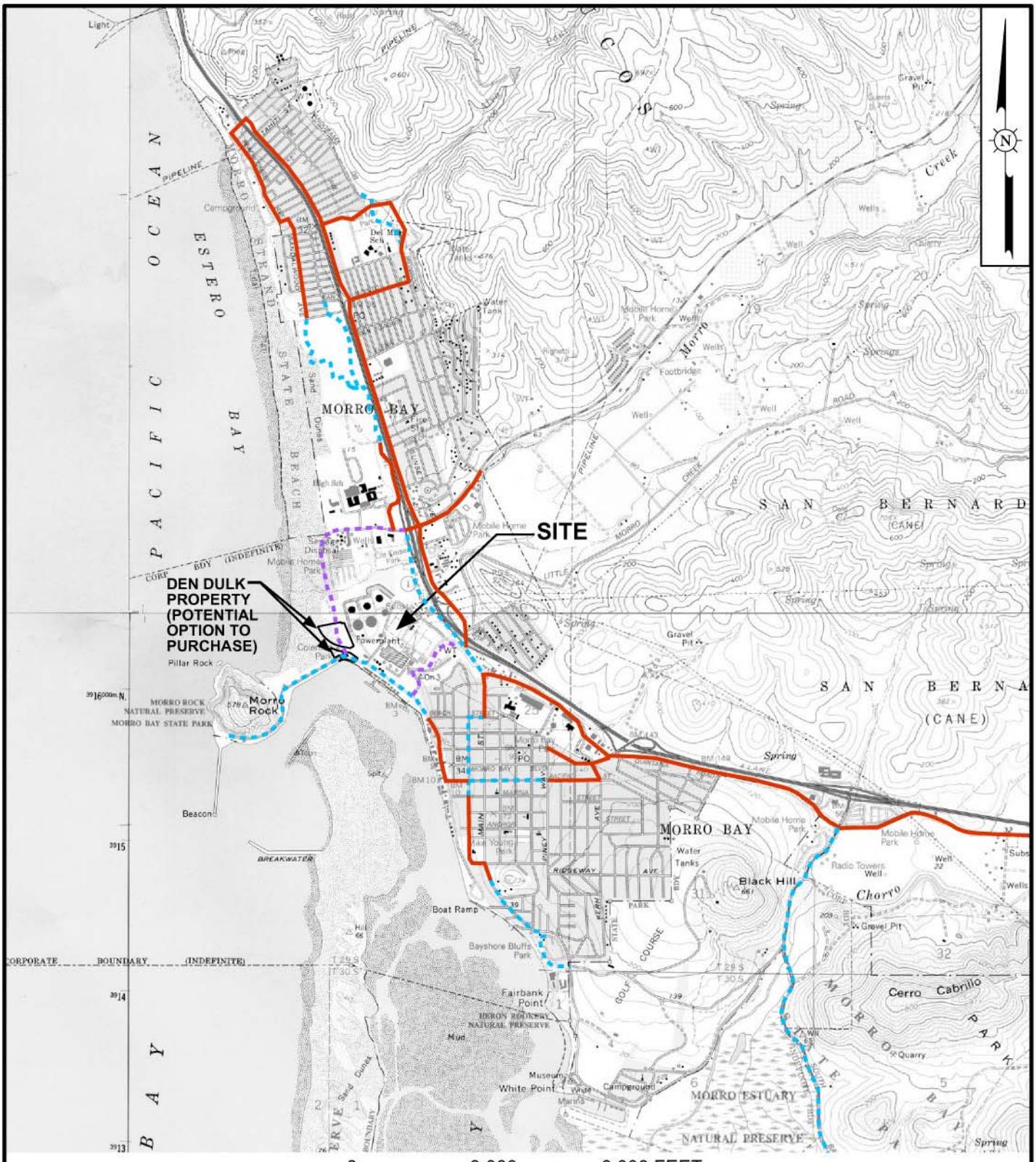


LEGEND

- EXISTING BIKEWAYS
- FUTURE CITY SPONSORED BIKEWAYS
- FUTURE DUKE ENERGY PROVIDED BIKEWAYS

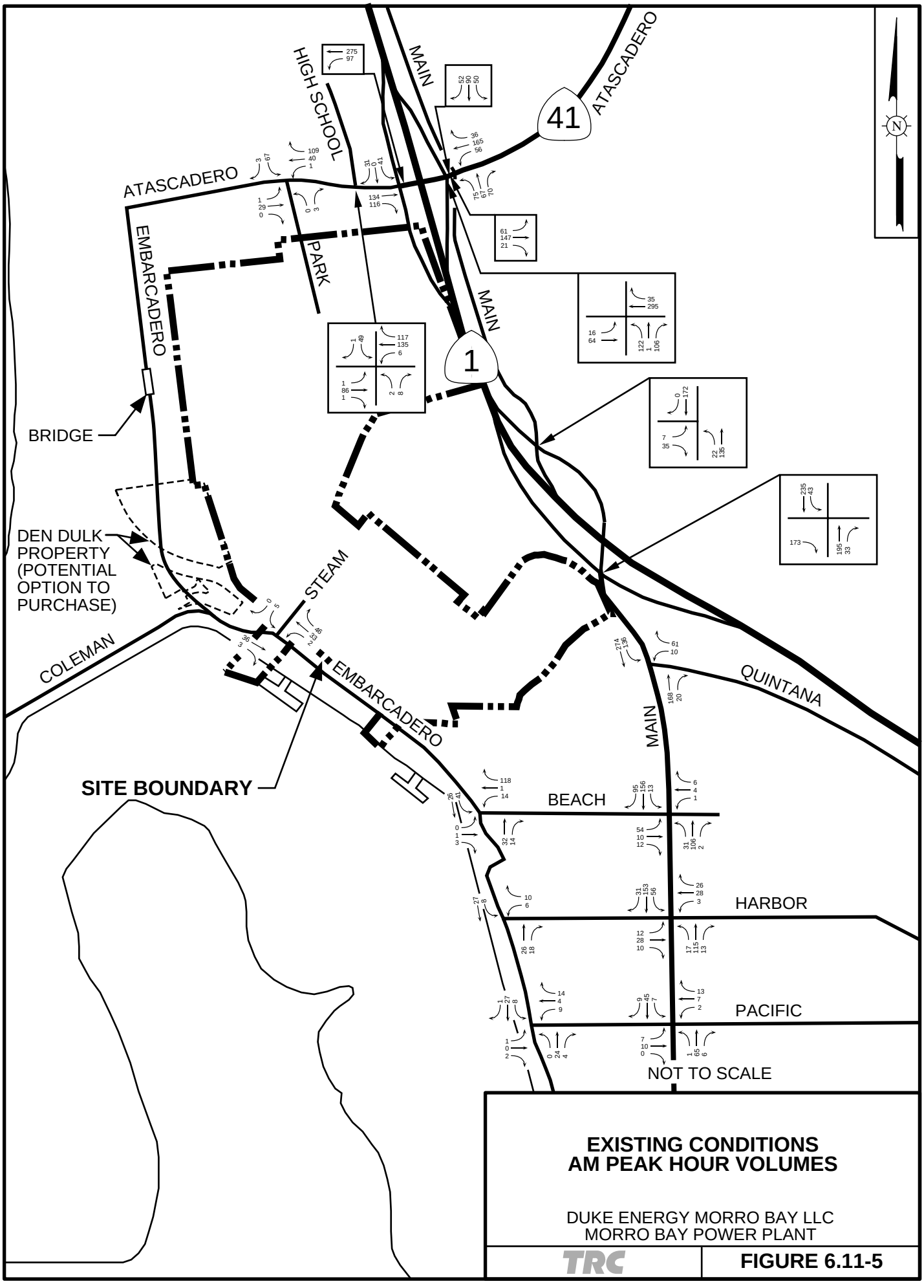
REFERENCE: USGS 7.5 MINUTE TOPOGRAPHIC MAPS OF MORRO BAY NORTH AND MORRO BAY SOUTH, CALIFORNIA DATED 1993 AND 1994.

CITY OF MORRO BAY EXISTING AND FUTURE BIKEWAY PROJECTS

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-4



EXISTING CONDITIONS
AM PEAK HOUR VOLUMES

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-5

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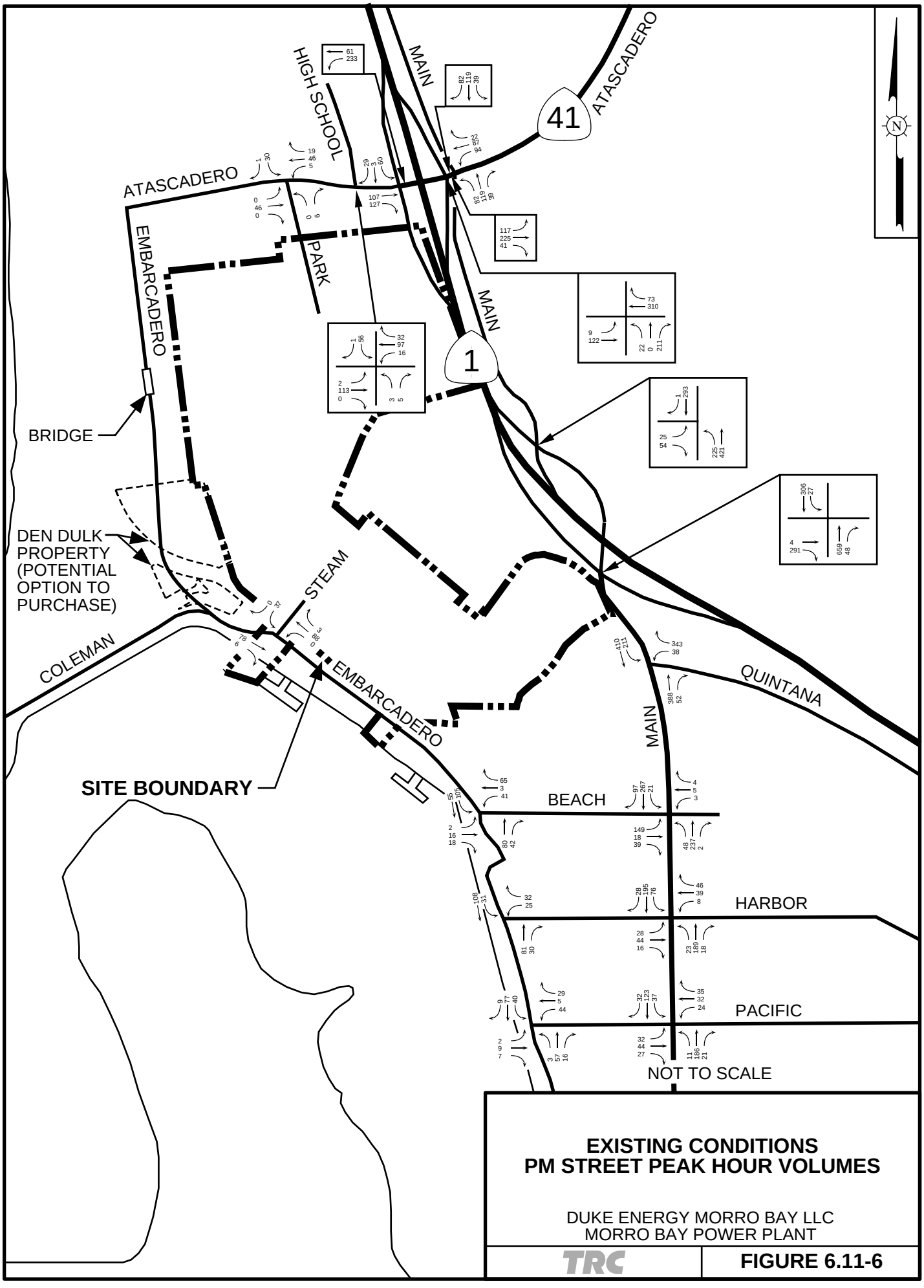

EXISTING CONDITIONS
PM STREET PEAK HOUR VOLUMES

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-6

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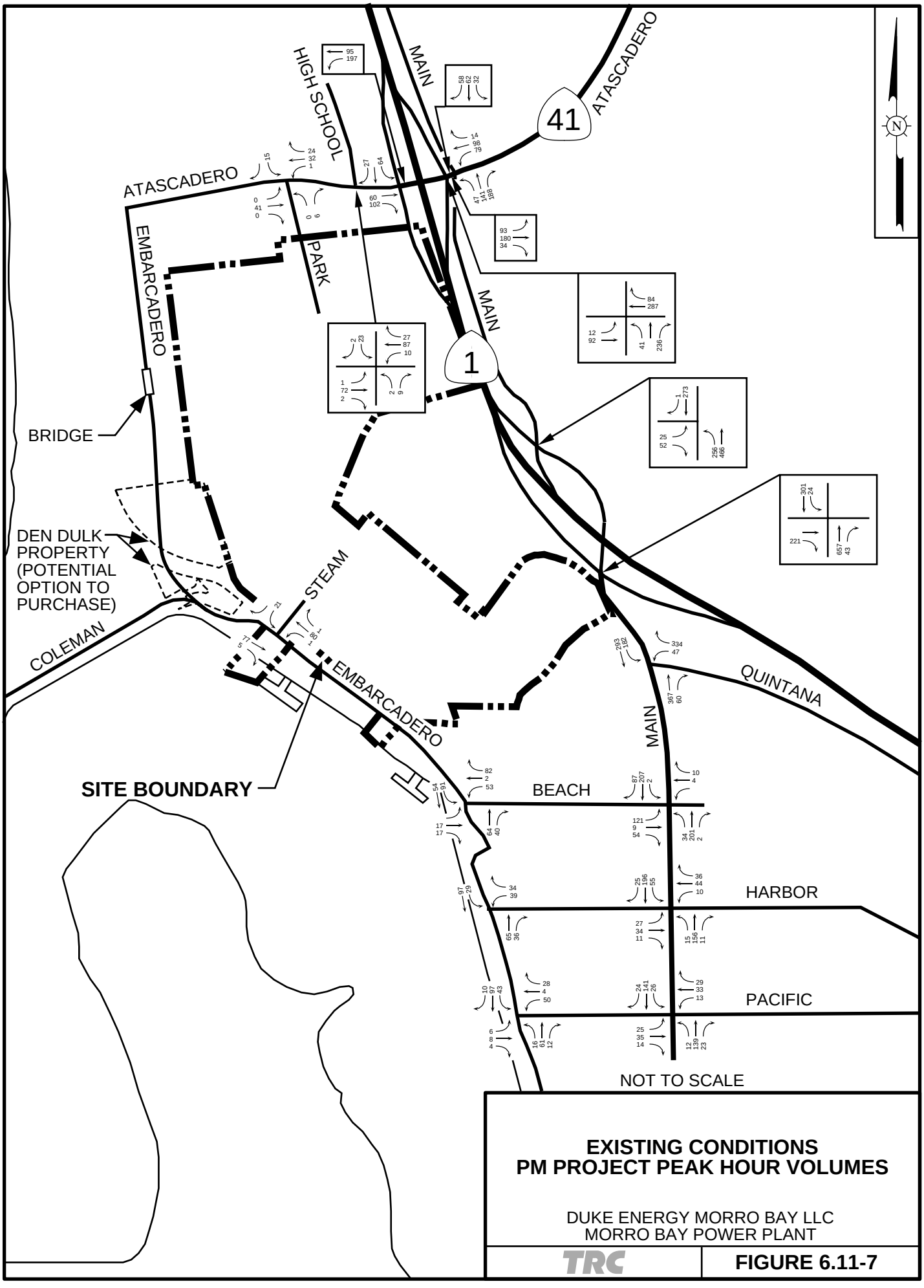


EXISTING CONDITIONS
PM PROJECT PEAK HOUR VOLUMES

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-7

TABLE 6.11-2

LEVEL OF SERVICE SUMMARY
EXISTING CONDITIONS

N-S STREET	E-W STREET	EXISTING LANE CONFIG-URATION	EXISTING INTERSECTION CONTROL		EXISTING CONDITIONS						ACCIDENT RATE(1)
					AM STREET		PM STREET		PM PROJECT		
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	
1. Main Street	Highway 41 (Atascadero Road)	NB EB WB	All-way Stop	Overall	13.2	B	13.9	B	13.3	B	1
2. Highway 1 Northbound Ramps	Highway 41 (Atascadero Road)	NB SB EB WB	Unsignalized	Overall WM	2.7	A C	1.4	A B	1.7	A B	2
3. Highway 1 Southbound Ramps	Highway 41 (Atascadero Road)	SB EW	Unsignalized	Overall WM	1.4	A C	2.8	A C	2.5	A B	--
4. Morro Bay High School East Driveway Motel 6	Atascadero Road	NB SB EB WB	Unsignalized	Overall WM	0.9	A B	1.3	A B	0.8	A A	--
5. Morro Bay High School West Driveway Private Driveway	Atascadero Road	NB SB EB WB	Unsignalized	Overall WM	1.5	A A	1.1	A A	0.7	A A	--

Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM = Worst Movement

(1) Accident rates obtained from the City of Morro Bay are presented as actual accidents occurring during a 1-year period from 1/1/98 to 12/31/98.

TABLE 6.11-2

LEVEL OF SERVICE SUMMARY
EXISTING CONDITIONS
(Continued)

N-S STREET	E-W STREET	EXISTING LANE CONFIG-URATION	EXISTING INTERSECTION CONTROL		EXISTING CONDITIONS						ACCIDENT RATE(1)
					AM STREET		PM STREET		PM PROJECT		
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	
6. Main Street	Highway 1 Northbound Ramps	NB SB WB	Unsignalized	Overall WM	0.7	A B	1.6	A D	1.7	A D	--
7. Main Street	Highway 1 Southbound Ramps	NB SB EB	Unsignalized	Overall WM	1.6	A A	1.5	A B	1.2	A B	--
8. Main Street	Quintana Road	NB SB WB	Unsignalized	Overall	7.6	A	8.5	B	12.9	B	--
9. Main Street	Beach Street	NB SB EB WB	All-way Stop	Overall	9.3	A	6	A	11.6	B	--
10. Main Street	Harbor Street	NB SB EB WB	All-way Stop	Overall	9.2	A	3.5	A	9.8	A	--

Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM = Worst Movement

(1) Accident rates obtained from the City of Morro Bay are presented as actual accidents occurring during a 1-year period from 1/1/98 to 12/31/98.

TABLE 6.11-2

LEVEL OF SERVICE SUMMARY
EXISTING CONDITIONS
(Continued)

N-S STREET	E-W STREET	EXISTING LANE CONFIG-URATION	EXISTING INTERSECTION CONTROL		EXISTING CONDITIONS						ACCIDENT RATE(1)
					AM STREET		PM STREET		PM PROJECT		
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	
11. Main Street	Pacific Street	NB SB EB WB	Unsignalized	Overall WM	1.1	A A	2.3	A B	1.9	A B	 --
12. Embarcadero	Beach Street	NB SB WB	All-way Stop	Overall	7.9	A	2.2	A	8.7	A	--
13. Embarcadero	Harbor Street	NB SB WB	Unsignalized	Overall WM	0.8	A A	1	A	1.3	A A	--
14. Embarcadero	Pacific Street	NB SB WB	Unsignalized	Overall WM	1.3	A A	1.8	A A	2.0	A A	--
15. Embarcadero	Existing Duke Energy Main Entrance	NB SB WB	Unsignalized	Overall WM	0.2	A A	0.8	A A	0.6	A A	--

Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM = Worst Movement

(1) Accident rates obtained from the City of Morro Bay are presented as actual accidents occurring during a 1-year period from 1/1/98 to 12/31/98.

TABLE 6.11-2
LEVEL OF SERVICE SUMMARY
EXISTING CONDITIONS
(Continued)

HIGHWAY LEVEL OF SERVICE SUMMARY

SEGMENT ON HIGHWAY 1			EXISTING CONDITIONS						ACCIDENT RATE(2)
From	To	Direction	AM			PM			
			Volume	Density	LOS	Volume	Density	LOS	
Morro Bay Blvd.	Main Street	NB	577	5.0	A	1,059	9.2	A	0.55
		SB	1,046	9.1	A	904	7.8	A	0.70
Main Street	Highway 41	NB	596	5.2	A	1,206	10.4	B	0.55
		SB	1,199	10.4	B	1,121	9.7	A	0.78

98-710 Rpts/AFC/Text/Tbls&Figs/Sect 6 (10/21/00/rm)

Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM=Worst Movement

(2) Segment Accident Rate = $\frac{\text{(accidents) (1,000,000}}{\text{(365 days) (average daily traffic) (miles)}} - \frac{\text{rate}}{\text{million vehicle mile}}$

Water Distribution

The City of Morro Bay has wells in the Chorro and Morro ground water basins from which the City obtains its water. The water is pumped to storage tanks to provide for both domestic and fire flow needs of the City. The water is distributed throughout the City in an extensive network of pipelines which are usually located within street rights-of-way.

In addition to the City's water system, the Whale Rock water main is routed through the City. Water from Whale Rock Reservoir is transmitted to the City of San Luis Obispo through this line.

Wastewater Collection

The City of Morro Bay jointly owns their wastewater treatment facility with the Cayucos Sanitation District. The pipeline collection system for each community is totally separate. Sewage is collected throughout the City via pipelines generally located in the street. Sewage is treated at the City's wastewater facility located on Atascadero Road, west of Highway 1.

Oil and Gas Pipelines

There is an existing oil pipeline network within the City.

The United States Navy also has a marine terminal located between the Chevron terminals and the Duke terminal which is in "caretaker status." At one time, jet fuel was transferred via a 16-inch pipeline from tanker ships moored at the terminal along Vashon Avenue through an easement across several residential lots, then along part of Whidbey Way to several storage tanks located adjacent to and east of the north Morro Bay residential area. From there, the jet fuel was shipped via a 6-inch pipeline to the Lemoore Naval Air Station located in the San Joaquin Valley. This system is also shut down and no longer used.

Southern California Gas Company provides natural gas to the majority of the City. This distribution system, like the water and sewer systems, is very extensive. There are natural gas lines under almost every street in the City. MBPP is served by a separate PG&E gas line from the northeast.

Duke has an offshore terminal for unloading fuel oil to operate the MBPP. This facility is in "caretaker status" as MBPP now operates on natural gas only.

Chevron U.S.A. (Chevron) has a tank farm located northeast of the City limits. At one time, crude oil from the lower San Joaquin Valley and San Ardo fields was stored in the tanks and then transferred by pipeline to oil tankers at Chevron's two offshore marine terminals for shipment to Los Angeles, San Francisco and Washington. This system is no longer used by Chevron.

Utility Transmission and Communication Lines

Electrical, telephone and cable television communication lines are located throughout the City. In most cases, these utility lines are located above ground, suspended from poles located in parkways or within easements in rear yards. Utilities are placed underground in newer developments as required by the Local Coastal Plan visual resource policies (see Section 6.13 - Visual Resources of this AFC, and also the Scenic Highway Element).

In the City of Morro Bay, four electric transmission lines owned and operated by PG&E begin at MBPP. These transmission lines are supported overhead by steel towers, designed in accordance with the applicable California Public Utilities Commission's rules and regulations. These tower lines transmit the electrical power easterly into the County and to the southern San Joaquin Valley. In recent years, a fiber optic cable has been installed on the 230-kilovolt (kV) line extending from MBPP.

Morro Bay Harbor is designated as a navigational waterway of the United States and is considered by the United States Coast Guard (Coast Guard) as a Safe Harbor during inclement weather. It is the only fully protected harbor between Monterey and Santa Barbara. The City of Morro Bay has harbor district primary responsibility for the enforcement of boating laws in the harbor while the Coast Guard provides assistance and is primarily responsible for vessel inspections, oil spill response, commerce activities and off-shore search and rescue operations. The United States Army Corps of Engineers is responsible for maintaining the harbor entrance, breakwaters and the federal navigation channels (Entrance Channel, Navy Channel and Morro Channel) to channel marker 20 (Fairbanks Point). The City of Morro Bay is responsible for the mooring areas, navigation channel past channel marker 20 and the revetments along the waterfront. While the Morro Bay State Park marina is located within the city limits, the California State Parks Department has maintenance authority for the marina.

The harbor has vessel size limitations due to sandbars and other obstructions in the channel, mooring and slip areas. Presently, the harbor can accommodate a maximum 10-foot draft vessel in

most slip and mooring areas. Other mooring areas are restricted to a maximum 8-foot draft and 45-foot vessel length. Two City operated T-Piers are available for tie-up for larger vessels and transient mariners. Furthermore, any vessel over 130-feet in length can not travel beyond the first T-Pier.

At this time, Morro Bay has 415 moorings and slips for recreational boats, recreational fishing boats, commercial fishing boats, Coast Guard boats and City boats. Actual docking capacity can vary according to the size to the vessel. The City of Morro Bay directly maintains and manages 50 commercial fishing slips 2 T-Piers and 8 moorings. The California State Parks Department owns the State Park Marina's 135 slips however, leases the marina concession to a private individual. The balance of slips and moorings are under City jurisdiction and leased to private operators for maintenance and operations.

Other amenities include a concrete decked launch ramp that is open year round and free of charge to the public. Currently there is no "water taxi" service however, a summer time trolley service is available to transport visitors from Morro Rock along the Embarcadero to Tidelands Park. The trolley system gives visitors quick and easy access to various shops, restaurants a loop which takes them through Morro Bay's downtown business district.

There is a public launch ramp in the harbor which is the only saltwater access of its type between Santa Barbara and Monterey. This facility is offered free to the public year around.

There is no regular taxi service to transport people by water from various points along the waterfront (e.g., from the State Park Marina to Morro Rock). However, a trolley system serves the Embarcadero area, allowing visitors to travel conveniently and quickly to the various commercial shops and restaurants along the wharf.

6.11.1.3.7 Other Transport

Table 6.11-3 summarizes the existing transit services to and within the City limits. The Morro Bay Dial-A-Ride Program (DAR) is the principal inner-city transportation service. DAR provides three types of services to the community.

- Immediate service when a person desires travel as soon as possible.
- Deferred service when a person schedules a travel time in advance.
- Periodic or subscription service when a patron has a regular pick-up day, time and location.

TABLE 6.11-3

EXISTING MORRO BAY TRANSIT SERVICES

CHARACTERISTIC	DIAL-A-RIDE (DAR)	CENTRAL COAST TRANSIT	SLOCAT MORRO BAY SAN SIMEON ACRES	RUNABOUT REGIONAL HANDICAPPED SERVICES
Funding Entity	City	JPA	SLO County	SLO County & All Cities Through JPA
Contractor/Operator(1)	Laidlaw Transit	Laidlaw Transit	SLO County	Santa Barbara Transportation Company
Service Area	City Limits	SLO/Morro Bay/ Los Osos	Morro Bay/ San Simeon Acres/Hwy 1	SLO County
Type of Service	DAR	Fixed Route	Fixed Route	DAR
Fare Structure(1)	$0.75/0.60 Seniors	$1.00 Route 7	$1.75/1.50/1.25/ 1.00/0.75/0.50 (Zonal structure)	$2.00
Transfers	Yes	Yes	Yes	No
No. of Routes	N/A	2	1	N/A
Operating Hours	M-F 7-6 Sat. 9-1	M-F 6:52-6:18 Sat. & Sun. None	M-F 6:24-6:41 Sat. 7:15-6:58	M-F 8-5 Sat. 10-5
Passes	No	Yes	Yes	No
Accessibility	Yes	Yes	Yes	Yes
Exclusive	No	No	No	Frail Elderly/Disabled

98-710 Rpts/AFC/Text/Tbls&Figs/Sect 6 (10/21/00/rm)

SLOCAT = San Luis Obispo County Area Transit
JPA = Joint Powers Authority
SLO = San Luis Obispo
N/A = Not applicable/Available

Source: City of Morro Bay Department of Public Works.

The DAR system began community service in 1977. It currently operates Monday through Friday from 6:45 a.m. to 6:00 p.m. An additional pilot program, offering service on Saturdays from 8:00 a.m. to 4:00 p.m., was reviewed and considered for continuance by the Morro Bay City Council in August 2000. The City owns and maintains four vehicles (two which are backup vehicles), and support facilities needed for DAR operations. The average response time for pick-up is less than 15 minutes when scheduled in advance. DAR can usually accommodate unscheduled trip riders within 1/2 hour when not full. This average response time is less than other communities, which normally are a 30 to 60 minute response time. The Morro Bay DAR has an annual ridership of approximately 45,000.

The San Luis Obispo Regional Transit Authority (SLORTA) was formed through a joint powers agreement between the County of San Luis Obispo and each of the seven incorporated cities to provide inter-city fixed route service and demand responsive service throughout the County.

The public bus system, Central Area Transit (CCAT) departs Morro Bay City Park and travels northward to San Simeon and southerly to San Luis Obispo. Key stops for SLOCAT include Cuesta Community College, California Men's Colony, Cal Poly University and the City of San Luis Obispo for connections to other areas in the County. A countywide public DAR service, "Runabout" is available to all riders with a priority preference to ADA certified passengers. For airport shuttle and special event transportation, services offered by the privately operated Ride-On Transportation Management Association (TMA).

6.11.2 IMPACTS

Significance criteria were determined based on California Environmental Quality Act (CEQA) Guidelines, Appendix G, Environmental Checklist Form (approved January 1, 1999) and on City of Morro Bay performance standards. An impact may be considered significant if it:

- Causes an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).
- Adds traffic to an intersection when the overall intersection is operating at LOS D or worse(1).

(1) Based on inquiries to the City of Morro Bay in spring, 1999, this Morro Bay performance standard has been applied to previous projects reviewed by the City of Morro Bay. Note that in connection with more recent discussions for this Project, the City of Morro Bay has recommended that Duke Energy use new traffic management level of service standards that were developed specifically for this Project. Since these new standards have not been used by the City of Morro Bay for other projects nor formally adopted by the City for use on future projects, these new standards do not meet the CEQA requirements for a performance standard. These standards are nevertheless addressed in the traffic technical support for this AFC (see Appendix 6.11-1).

- Causes a substantial increase in hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Creates inadequate emergency access.
- Creates inadequate parking capacity.
- Creates a conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks).

The following discussion evaluates potential impacts to regional and local roadways and other transportation systems from construction and operation of the Project. Potential impacts from the three construction stages are reviewed and discussed below. Project operations impacts (after completion of construction) are also presented. Since peak impacts from Stage II are substantially greater than for either Stages I or III, detailed traffic modeling for Stage II was performed and is presented in Section 6.11.2.1.2 below. Discussions for Stages I and III focus primarily on impacts that would be unique to those stages or that would not be covered by the detailed analysis of peak impacts for Stage II. As concluded below, overall impacts from construction and permanent operation of the Project were determined to be not significant.

6.11.2.1 Construction Impacts

Project construction will result in a temporary increase in traffic associated with the movement of employee vehicles, construction equipment and material deliveries on the transportation network in the Morro Bay area. These impacts are discussed below.

6.11.2.1.1 Stage I Construction Impacts

Stage I construction activities are described in Chapter2.0- Project Description of this AFC. Stage I activities will consist of the decommissioning and removal of existing onsite MBPP fuel oil tanks. The Stage I activities are expected to last only 3 months. Work force levels for Stage I will be very low (see Figure 6.11-1), with less than 40 construction employees arriving each day for a single construction shift (8:00 a.m. to 5:00 p.m.). The tank decommissioning and removal personnel will use the main MBPP entrance and park in a designated contractors' area onsite. As described in Section 6.11.1.3.1 above, MBPP maintenance activities, which occur regularly , currently involve up to 200-300 additional construction employees for a short (2- to 3-month) period. These employees use the main MBPP gate along with permanent employees who currently

operate the power plant. The most recent maintenance period occurred the in spring of 2000. Based on this history of maintenance employee traffic to and from the site, impacts from the 40 or less Stage I construction personnel are consistent with current MBPP maintenance activity impacts and are not projected to be significant.

Stage I delivery truck activity is estimated to average about 10 to 15 truck a day. These trucks will use the MBPP back entrance (see Figure 6.11-3) and will be scheduled to avoid peak Morro Bay traffic periods (e.g., 8:00 a.m. to 9:00 a.m. and 4:00 p.m. to 5:00 p.m.). As a result, traffic impacts for this 3-month period from delivery trucks will not be significant.

6.11.2.1.2 Stage II

Stage II construction activities are described in Chapter 2.0 - Project Description of this AFC. Stage II activities will consist of construction of the two new combined-cycle units. Because traffic volumes for Stage II will be higher than for Stage I, detailed traffic modeling for this "peak" condition was performed and is described below.

6.11.2.1.2.1 Stage II Construction Employee Vehicle Assumptions

Figure 6.11-1 shows estimated Stage II work force levels. As shown, Stage II construction activities will occur over an estimated 21-month period and will require a workforce that "pyramids" over time, ranging from about 40 workers during the first month to a maximum of about 700 workers during the day shift in month 13. As shown in Figure 6.11-1, a nightshift (beginning no earlier than 7:00 p.m. to ending no later than 6:00 a.m.) with a maximum of approximately 250 employees will be used for a few months during the middle of the Stage II activities when maximum construction activities will be occurring in order to expedite the construction schedule.

Project construction traffic generation is shown in Table 6.11-4. To arrive at a maximum potential Project-related impact, the following assumptions were made and are based on similar plant construction activities:

- 25 percent of the workers will carpool. The rest will drive a separate vehicle to the construction site, making two one-way trips per day (one round trip from home).
- 10 percent of the onsite workers will occasionally travel offsite during the day for personal business. This acknowledges that senior construction personnel may occasionally travel offsite during the day, through no plans for regular offsite events have been made, and experience with similar projects is that no offsite travel can be expected.

TABLE 6.11-4

PROJECT CONSTRUCTION TRIP GENERATION
DUKE ENERGY MORRO BAY POWER PLANT

PROJECT COMPONENT	DURATION	SIZE	AVG. DAILY TRIPS	MORNING PEAK HOUR						EVENING PEAK HOUR		
				Project Peak (6:00-7:00 a.m.)			Street Peak (7:00-8:00 a.m.)			Project Peak (5:00-6:00 p.m.)		
				In	Out	Total	In	Out	Total	In	Out	Total
A. Construction Personnel												
1. Peak Construction Staffing (Day Shift)	17 Months	700	836	304	30	334	34	4	38	30	304	334
B. Visitors (UPS, parcel post, office supplies, etc.)												
1. Peak Construction (5% of staffing)	7 Months	35	77	0	0	0	6	1	7	4	4	8
C. Deliveries												
1. First 3 Months	6 to 8 Months	2,000	25	- - - - - - - - Throughout the day - 9:00 a.m. to 4:00 p.m.(1) - - - - - - - -								
2. Last 15 Months	13 Months	1,520	12	- - - - - - - - Throughout the day - 9:00 a.m. to 4:00 p.m. (1) - - - - - - - -								

98-710 Rpts/AFC/Text/Tbls&Figs/Sect 6 (10/21/00/rm)

(1) Deliveries which must occur at other times will be brought into the "back" entrance off of Main Street.

- 10 percent of the construction employees may arrive late to work each morning though, again, this is very conservative and experience indicates that very few will actually show up late to work.
- 10 percent of the construction workers may leave early for personal emergencies.

In addition to construction traffic, visitors, catering, staff-generated trucks and small deliveries (United Postal Service, Parcel Post, office supplies, etc.) will likely be generated. An allowance of 5 percent of staff-generated traffic is estimated for this component of Project traffic.

Estimates for the daily peak time periods for the 8 months of construction with the highest staffing levels include 1,251 daily trips, 462 Project morning peak hour trips (i.e., 6:00 a.m. to 7:00 a.m.), 60 street morning peak hour trips (i.e., 7:00 a.m. to 8:00 a.m. to allow for late arrivers), 73 evening street peak hour trips (i.e., 4:00 p.m. to 5:00 p.m.), and 409 Project afternoon peak hour trips (i.e., 5:00 p.m. to 6:00 p.m.) The traffic analysis was performed using these numbers as a worst-case analysis.

Assumptions regarding the origin of workers (and the direction they travel to and from the site) are based on the location of population centers and the configuration of roads and highways in the region. Potential origins for construction workers fall into two general categories: from communities to the north and east, such as Cayucos, Cambria, Atascadero and Paso Robles or from areas to the south, such as San Luis Obispo, Arroyo Grande, Nipomo and Santa Barbara. A small number of employees are assumed to come from the immediate Morro Bay area, either through temporary relocation or local residents. These assumptions were discussed with local labor unions. The worker origin assumptions are summarized in Table 6.11-5.

As shown, it is estimated that about 32 percent of construction workers will arrive from population centers to the north and east along Highways 1 and 41 and 51 percent will arrive from the south along Highway 1. The rest are assumed to come from local areas, either as local residents or people who have relocated (temporarily) to the area. This is consistent with assumptions made in the socioeconomic evaluations presented in Section 6.10 of this AFC. It is also assumed that construction workers will work up to 10-hour days, and as many as 6 days a week (Monday through Saturday).

As shown in Figures 6.11-2 and 6.11-3, primary access from the north is via Highway 1 and State Route 41. From the south, access is via Highway 1. According to Caltrans and local traffic counts (see Appendix 6.11-1) performed in April through June 2000, local weekday morning

TABLE 6.11-5

PROJECT TRAFFIC DISTRIBUTION
DUKE ENERGY MORRO BAY POWER PLANT

POPULATION AREA	APPROX-IMATE POPU-LATION	PERCENT OF POPU-LATION	DISTANCE FROM PROJECT	TRAVEL TIME FROM PROJECT	GRAVITY FACTOR 1/TRAVEL TIME	POPU-LATION TIMES GRAVITY FACTOR	ADJUSTED PERCENT OF POPU-LATION	PROBABLE TRAVEL ROUTE	PERCENT OF POP. AREA	PERCENT OF PROJECT TRAFFIC
1. Paso Robles	20,020	9%	29	29	0.0345	690	5%	Highway 41	100%	4.6%
2. Unincorporated North County (w/o Templeton)	17,979	8%	25	25	0.0400	719	5%	Highway 41	100%	4.8%
3. Cambria	5,401	2%	20.6	20.6	0.0485	262	2%	Highway 1 N	100%	1.8%
4. Cayucos	2,876	1%	6.4	6.4	0.1563	449	1%	Highway 1 N	100%	1.0%
5. Morro Bay	9,221	4%	1	5	0.2000	1,844	4%	Main St. N Main St. S RV Park Radcliffe St. Beach St. Harbor St. Kennedy Way Pacific St. Shasta Ave. Quintana Rd S Highway 1 N	10% 10% 5% 5% 10% 10% 5% 5% 10% 10% 20%	0.4% 0.4% 0.2% 0.2% 0.4% 0.4% 0.2% 0.2% 0.4% 0.4% 0.9%
6. Los Osos/ Baywood Park	14,444	6%	3	6	0.1667	2,407	6%	Main St. S Highway 1 S	50% 50%	3.1% 3.1%
7. Templeton	8,985	4%	21.6	21.6	0.0463	416	3%	Highway 41	100%	2.8%
8. Atascadero	27,356	12%	16	16	0.0625	1,710	11%	Highway 41	100%	11.5%
9. Central County (City of SLO)	57,000	25%	13.4	13.4	0.0746	4,254	29%	Highway 1 S	100%	28.5%
10. South County	63,142	28%	29.3	29.3	0.0341	2,155	14%	Highway 1 S	100%	14.5%
TOTAL	226,424	100%				14,907	80%			80%

98-710 Rpts/AFC/Text/Tbls&Figs/Sect 6 (10/21/00/rm)

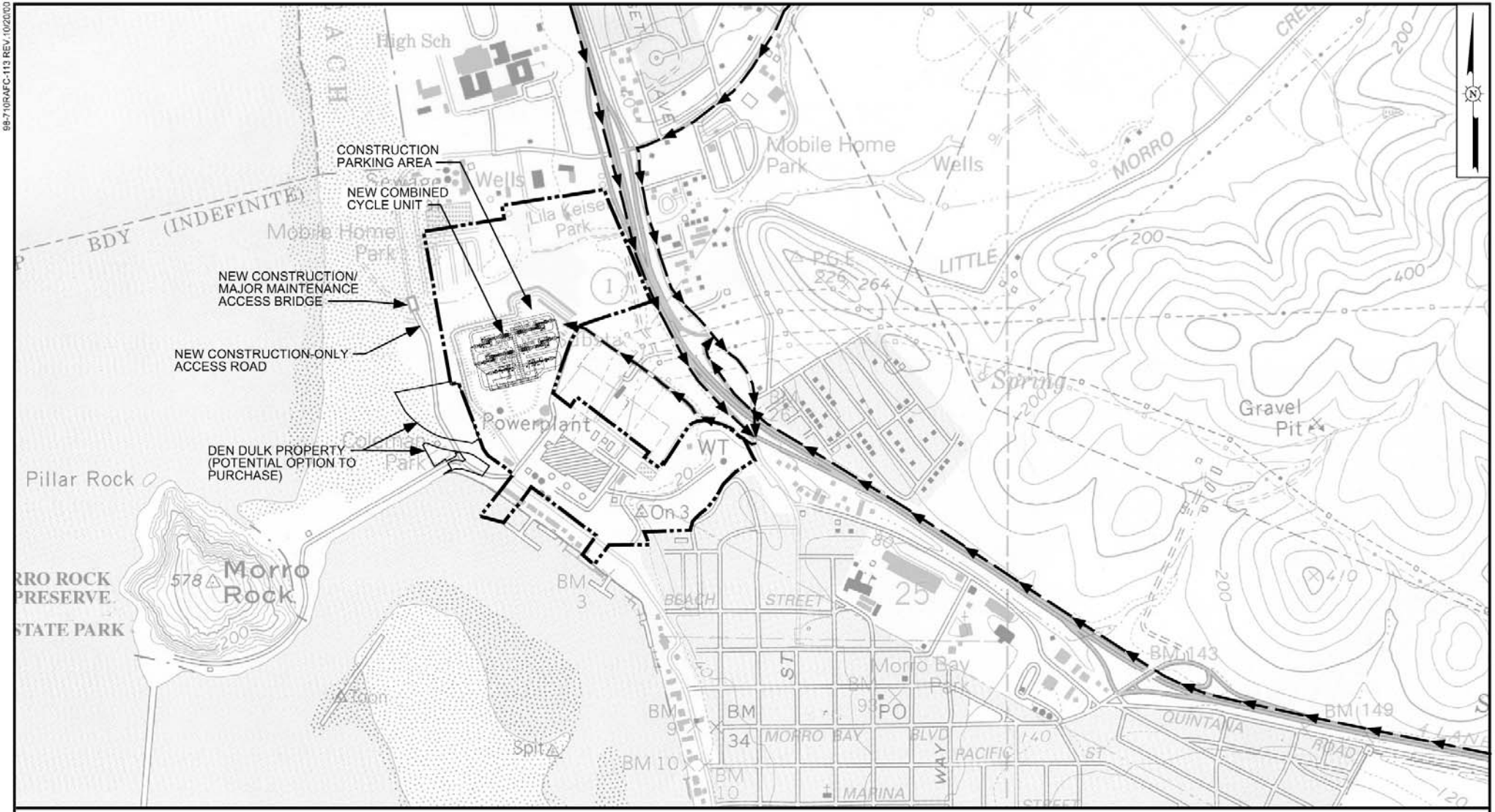
peak traffic periods are from about 8:00 a.m. to 9:00 a.m.; a minimal impact lunch peak period occurs from about 11:00 a.m. to 1:00 p.m.; and the afternoon/evening peak occurs 4:00 p.m. until approximately 5:00 p.m. Since MBPP is near Morro Bay High School, a morning peak period for the high school was also identified as a result of the traffic counts (see Appendix 6.11-1). The morning peak occurs from 7:15 a.m. to 8:15 a.m. The traffic counts do not indicate a clear afternoon peak. Instead, Morro Bay High School officials have confirmed that high school students leave at different times in the afternoon, depending upon other school events, etc. This was confirmed through discussion with Morro Bay High School officials. Saturday traffic counts (see Appendix 6.11-1) indicate a modest morning peak between 8:00 a.m. and 10:00 a.m. and an afternoon peak between 4:00 p.m. and 5:00 p.m.

Based on discussions with Caltrans and the City of Morro Bay, MBPP construction shifts will be designed to avoid these road and high school peak periods (Muick, 1999; Newland, 1999). This will minimize impacts to roads in the area during the construction period and make it easier for the workers as well. As a result, day shifts for construction workers will begin no later than 7:00 a.m. and would end either before the hours of 4:00 p.m. or after 5:00 p.m., and no later than 6:00 p.m. An evening or "swing" shift will be used during the peak construction activity period. This evening shift would not start before 7:00 p.m. and would end no later than 6:00 a.m. When Saturday shifts are used for MBPP construction, they will follow this same shift pattern. Caltrans and the City of Morro Bay have indicated that these times will minimize impacts on local roads and highways.

Duke Energy has also identified the access routes shown in Figures 6.11-8 through 6.11-12 to supplement the shift scheduling plans described above. These routes were developed based on discussions with the City of Morro Bay and MBPP staff experience with daily traffic over the last 20 years. Note that a key component of these routes is construction of a new bridge over Morro Creek. This will allow construction employee traffic and deliveries to avoid the central Morro Bay business district and the Embarcadero during the day. Impacts to existing traffic are based on workers using the routes shown in these figures. However, to be conservative, it has been assumed that a small number of construction workers (about 25 to 30) do not follow the designated routes and travel through the City of Morro Bay to the main site entrance on Embarcadero each morning and depart using the same nondesignated routes in the afternoon.

Based on the Project construction traffic routing (see Figures 6.11-8 through 6.11-12), construction workers will exit Highway 1 at Main Street (from both directions) and proceed to the MBPP PG&E "back" entrance (see Figure 6.11-8). Similarly, construction workers who arrive from the east on Highway 41 will turn left at Main Street and also proceed to the MBPP PG&E "back" entrance.

98-710/RAFC-113 REV.10/20/00



LEGEND

DIRECTION OF TRAVEL

REFERENCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP OF MORRO BAY NORTH AND MORRO BAY SOUTH, CALIFORNIA, DATED 1993 AND 1994.

0 1/4 1/2 MILE

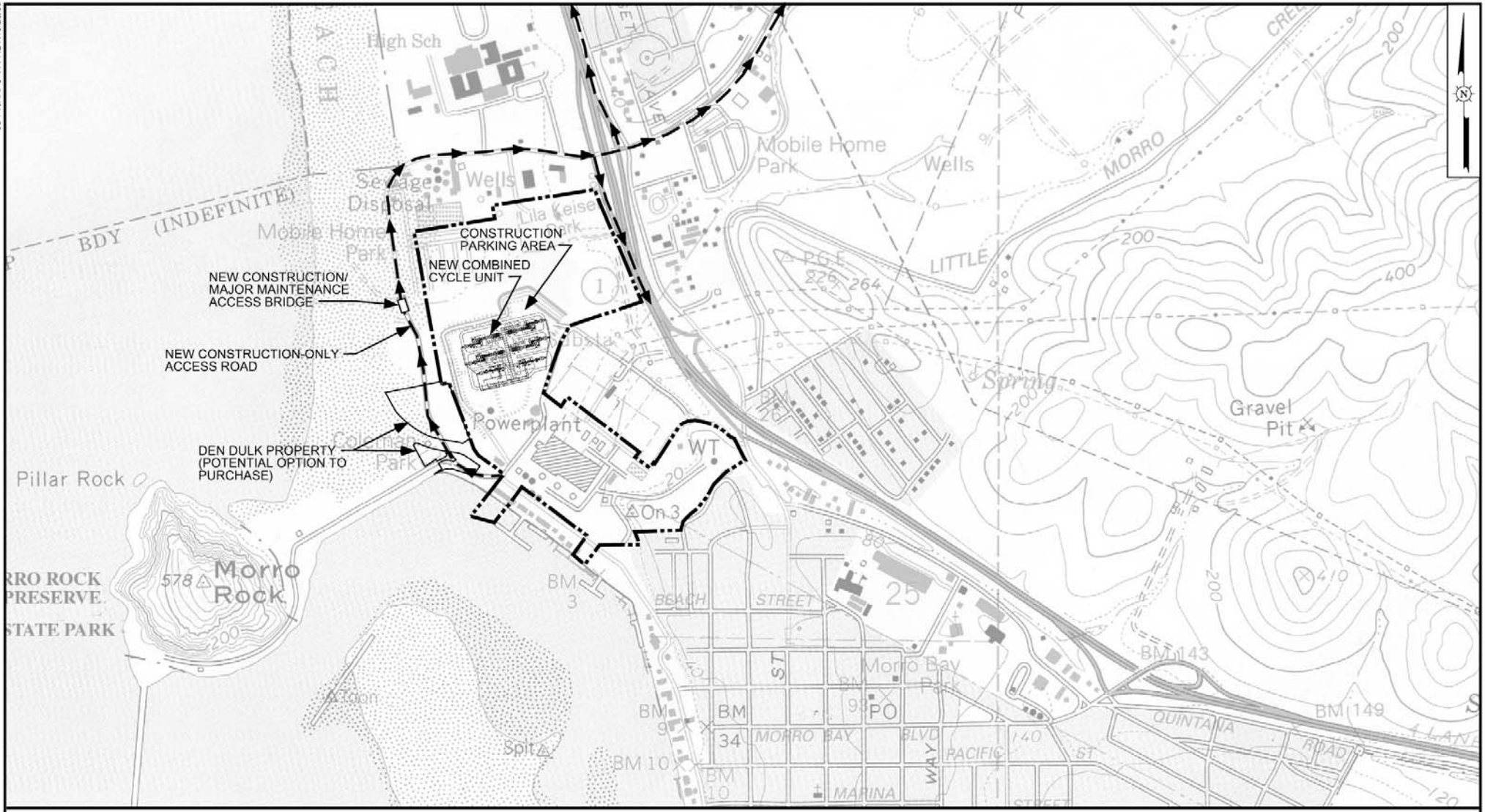
APPROXIMATE SCALE

A.M. CONSTRUCTION EMPLOYEE INBOUND ROUTE

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-8



LEGEND

DIRECTION OF TRAVEL

REFERENCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP OF MORRO BAY NORTH AND MORRO BAY SOUTH, CALIFORNIA, DATED 1993 AND 1994.

0 1/4 1/2 MILE

APPROXIMATE SCALE

P.M. CONSTRUCTION EMPLOYEE OUTBOUND ROUTE

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-9

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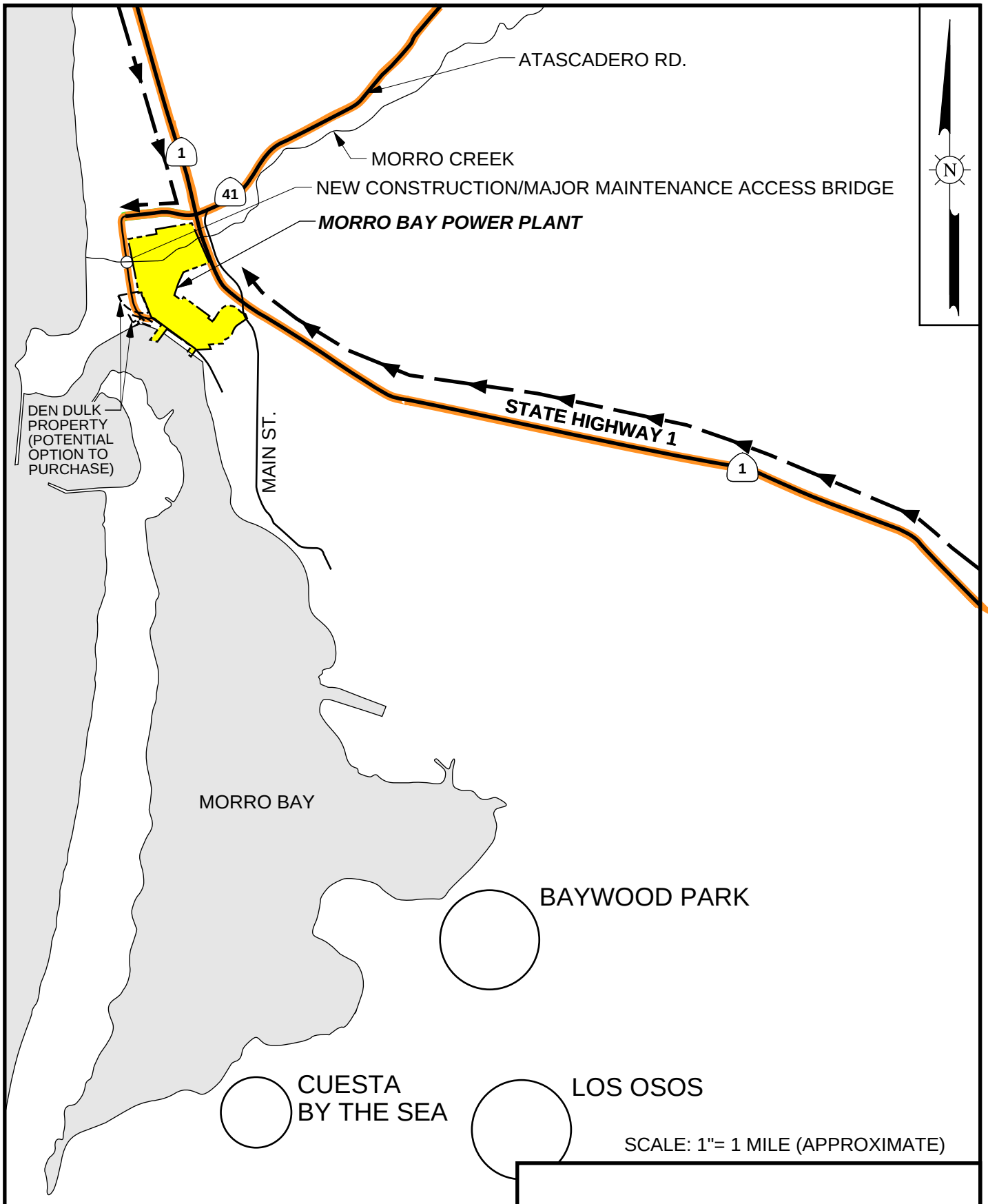


LEGEND

DIRECTION OF TRAVEL

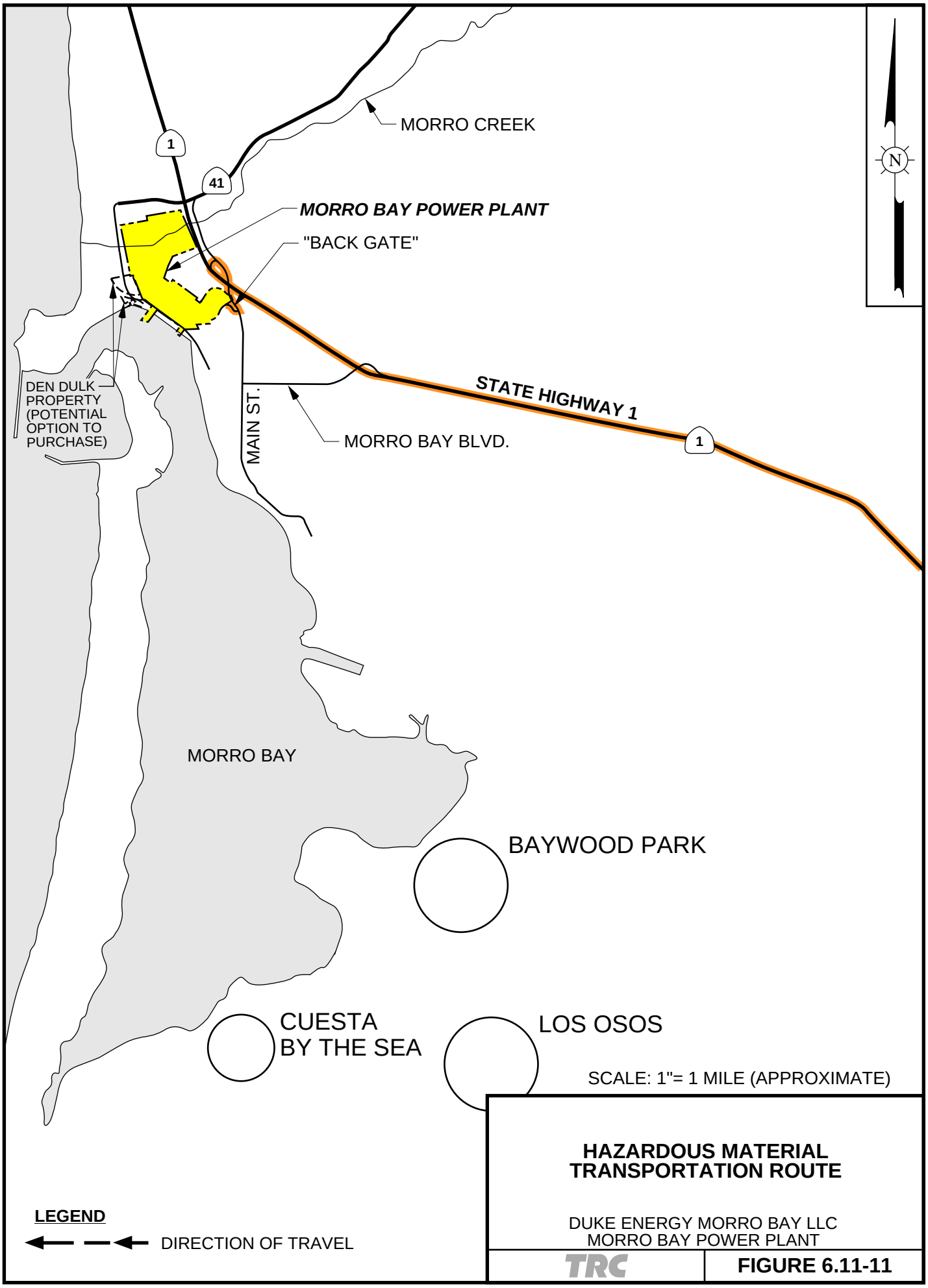
CONSTRUCTION DELIVERY ROUTE

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-10

98-710RAFC-74 REV.10/20/00



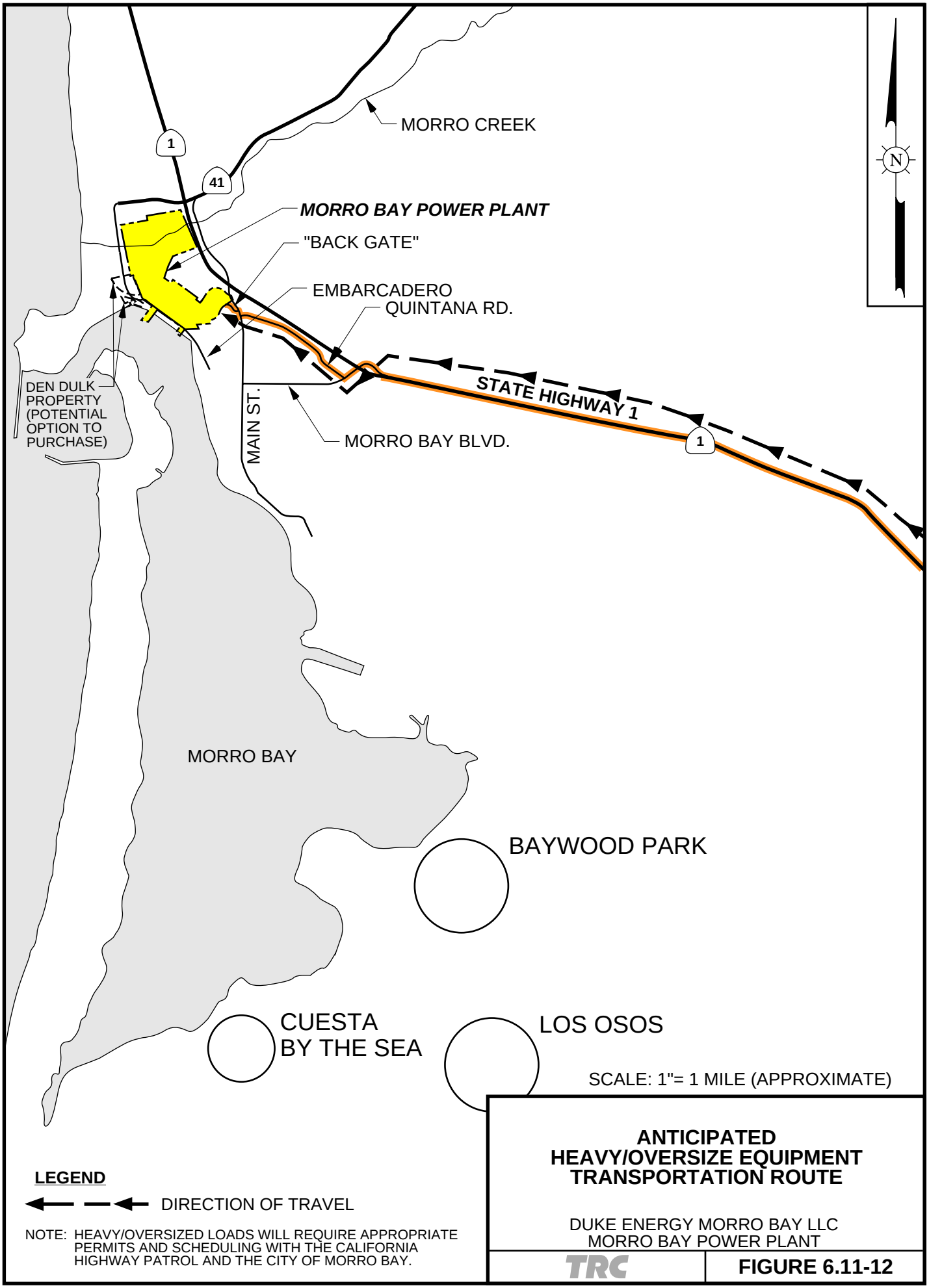
HAZARDOUS MATERIAL TRANSPORTATION ROUTE

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-11

98-710RAFC-77 REV.10/20/00



LEGEND

DIRECTION OF TRAVEL

NOTE: HEAVY/OVERSIZED LOADS WILL REQUIRE APPROPRIATE PERMITS AND SCHEDULING WITH THE CALIFORNIA HIGHWAY PATROL AND THE CITY OF MORRO BAY.

ANTICIPATED HEAVY/OVERSIZE EQUIPMENT TRANSPORTATION ROUTE

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-12

Morning shift start times will begin no later than 7:00 a.m. Use of this "back" entrance in the morning has two advantages. First, the back entrance is immediately adjacent to Highway 1, which makes for little or no travel on city streets in the morning. Given the fact that weekday and weekend Morro Bay traffic conditions are extremely light in the 6:00 a.m. to 7:00 a.m. time period (Morro Bay weekday morning rush hour is 8:00 a.m. to 9:00 a.m. and the Saturday a.m. rush hour is light and does not begin until 9:00 a.m.) on Main Street, this results in a negligible impact on morning traffic. A second advantage is avoidance of the Morro Bay High School weekday peak a.m. hour. Even though high school traffic does not become substantial until 7:15 a.m., use of the new Morro Creek bridge in the morning would bring morning construction worker traffic close to the high school a.m. peak, especially if a few employees happen to arrive after the 7:00 a.m. start time (note the traffic analysis does conservatively assume that about 10 percent of employees will arrive late to work, between 7:00 a.m. and 8:00 a.m.).

In the afternoon, construction workers will exit the site from a new construction access road built to accommodate the new Morro Creek bridge (see Figure 6.11-9). This exit route was chosen by Duke Energy because it avoids Main Street during hours when higher traffic volumes are present during weekdays and on Saturdays. Also, traffic count data, together with discussions with Morro Bay High School indicate that high school street activity is clearly over by 5:30 to 6:00 p.m., when the construction shift is complete. Duke has nevertheless agreed to work with Morro Bay High School (and other schools in the City, as appropriate) to be aware of after school events when additional coordination may be required. At the completion of the day shift, employees would exit the site, cross the new bridge and either enter Highway 1 (north or south) at the Atascadero Road/Highway 1 Interchange or continue straight on Atascadero Road. Note, again, that while we have analyzed 10 percent of the traffic leaving the site early between 4:00 p.m. and 5:00 p.m., this is very conservative and an unlikely scenario for several reasons. First, 10 percent is a very high number for emergency trips home. Experience with other construction sites indicates that workers tend to stay for their entire shift, since that is how they get paid. Second, if a personal emergency does occur for workers, it is very unlikely to always occur between 4:00 p.m. and 5:00 p.m. Nevertheless, we chose to analyze this time period as a worst case (Morro Bay street peak). In reality, if necessary, workers departing the site during this time could be sent home using a special route to avoid impacts in particular locations during the Morro Bay street peak.

Finally, a Transportation Management Plan will be prepared prior to construction. The plan will address traffic related to construction workers and truck and rail deliveries of equipment, materials and supplies. Construction contractors will be required to comply with provisions of the

Transportation Management Plan, which will be a part of the contract scope of work. Compliance will be a condition for site work. The plan will include, but will not be limited to:

- Scheduling
  - Construction shifts
  - Shift changes during off-peak hours
  - Deliveries
- Routing
  - Construction personnel
  - Truck delivery of construction materials
  - Operations personnel, equipment and supplies (during the construction period)
- Traffic Controls
  - Flagmen
  - Signage
  - Traffic Control officer coordination
- Weight and Load Information

6.11.2.1.2.2 Stage II Construction Equipment and Material Delivery Assumptions

Project construction will require the use and installation of heavy machinery and associated systems, structures and materials. Heavy equipment to be used throughout Project construction includes trenching and earthmoving equipment, forklifts, cranes, cement mixers and drilling equipment. Materials include concrete, wire, pipe, cable, fuels, reinforcing steel and consumables.

To manage traffic conditions associated with truck transport of these materials, Duke Energy will schedule truck transport activity to occur during off peak traffic hours (i.e., avoiding the 7:00 to 9:00 a.m. and 4:00 to 5:00 p.m. hours) and/or at night (i.e., after 8:00 p.m. and before 6:00 a.m.). This will be accomplished using one or both of the following methods. First, offsite construction support areas will be used to allow equipment and materials to be scheduled for transport to the site when they are needed. Material and equipment, arriving from out-of-town destinations, will be delivered to the construction support areas and stored for a period of weeks to months and then scheduled for delivery to the site.

A second technique for managing traffic associated with truck transport will be to require vendors to agree to schedule truck transport with Duke Energy as part of their contract scope of work. These agreements will stipulate a route and time window for arrival at the site. If enough uncertainty exists with a particular vendor about its ability to comply with a daytime window for arrival, nighttime delivery will be stipulated. According to Morro Bay High School officials, departing students in the afternoon hours leave at different times, depending upon after school

events, etc., so Duke Energy will work with the school to determine the extent to which any specific afternoon traffic coordination is required.

A large volume of daytime deliveries will occur during development of the new power plant foundation. This activity will occur during the first 6 to 8 months of the Stage II construction period. Up to 40 concrete truck transports will occur on busy days. Discussions have begun to secure concrete from a local contractor, just across Morro Creek on Atascadero Road. This will allow ready movement of concrete trucks to and from the site across the new Morro Creek bridge with very little impact on Morro Bay roads. Duke Energy will encourage this local contractor to receive deliveries of sand and gravel for concrete preparation during off peak traffic hours or evenings.

Finally, a limited number of service oriented truck traffic is expected during the day, such as parcel delivery services, waste management, bottled water trucks, etc. This service truck traffic currently arrives and departs MBPP each day. We have assumed a worst case that these deliveries arrive at the site "back" entrance each day for modeling purposes.

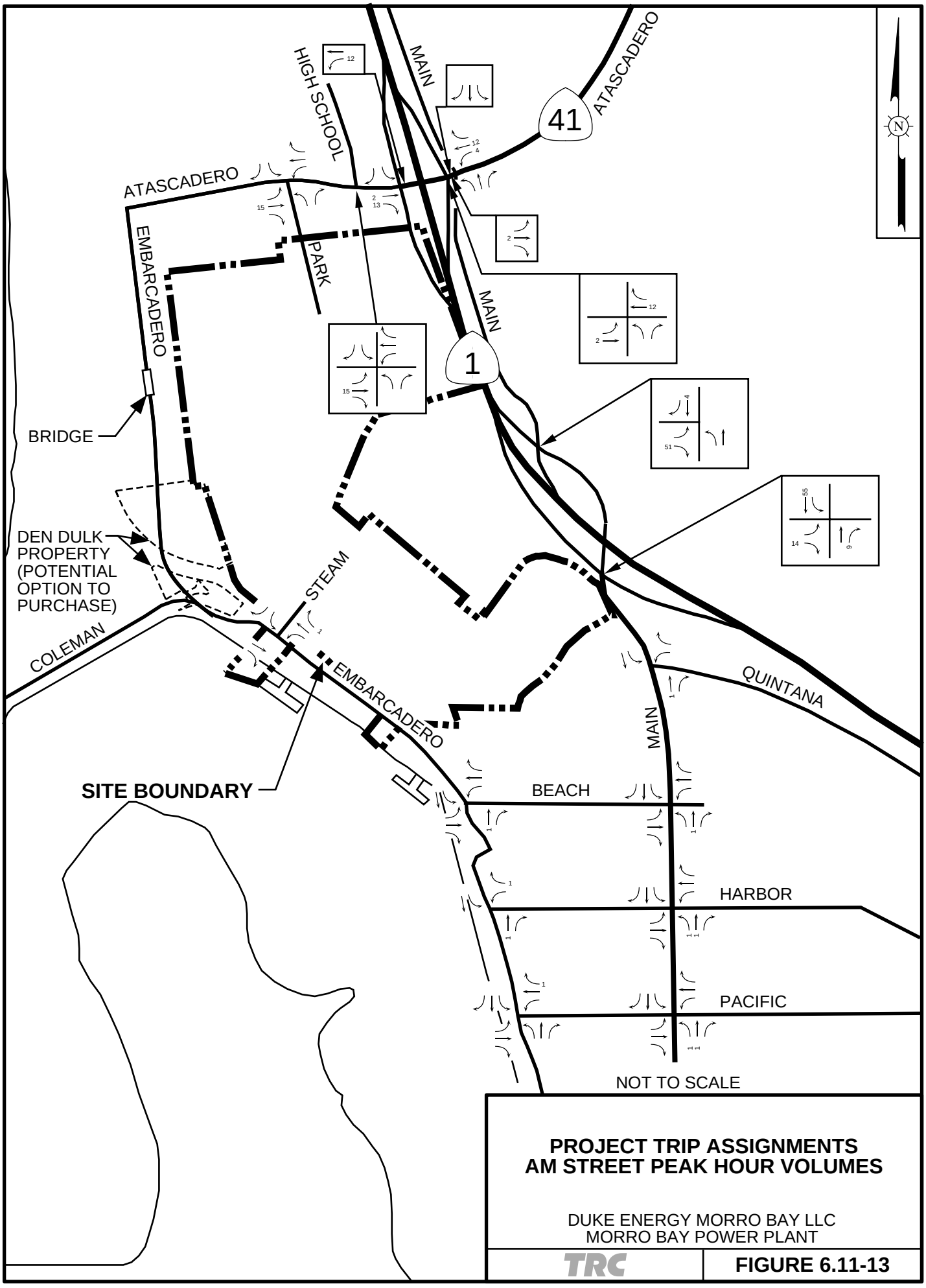
Truck transport trip assumptions are summarized in Table 6.11-4. Approximately 3,500 truck transports are expected over the 21 month Stage II construction period.

The distribution of truck traffic for equipment and materials deliveries is assumed to be the same as the construction workforce, with about one-third originating in areas to the north and especially to the east from Route 41, and one-half in areas to the south.

6.11.2.1.2.3 Stage II Construction Traffic Analysis

The foregoing assumptions have been incorporated into our traffic impact analysis. Figures 6.11-13, 6.11-14 and 6.11-15 show assumptions for a.m. and p.m. Project traffic on key roads. Note that Figure 6.11-13 is provided to show workers who are assumed to arrive after 7:00 a.m. each morning (see Table 6.11-4). The results are discussed below.

Figures 6.11-16 and 6.11-17 and 6.11-18 show Project traffic added to Morro Bay a.m. and p.m. traffic. Table 6.11-6 shows the maximum level of service impacts to Morro Bay traffic from the Project. As shown, no discernable impacts will occur for the project a.m. peak. This is because at 7:00 a.m. when the construction shift will start, no significant traffic volumes exist on Main Street

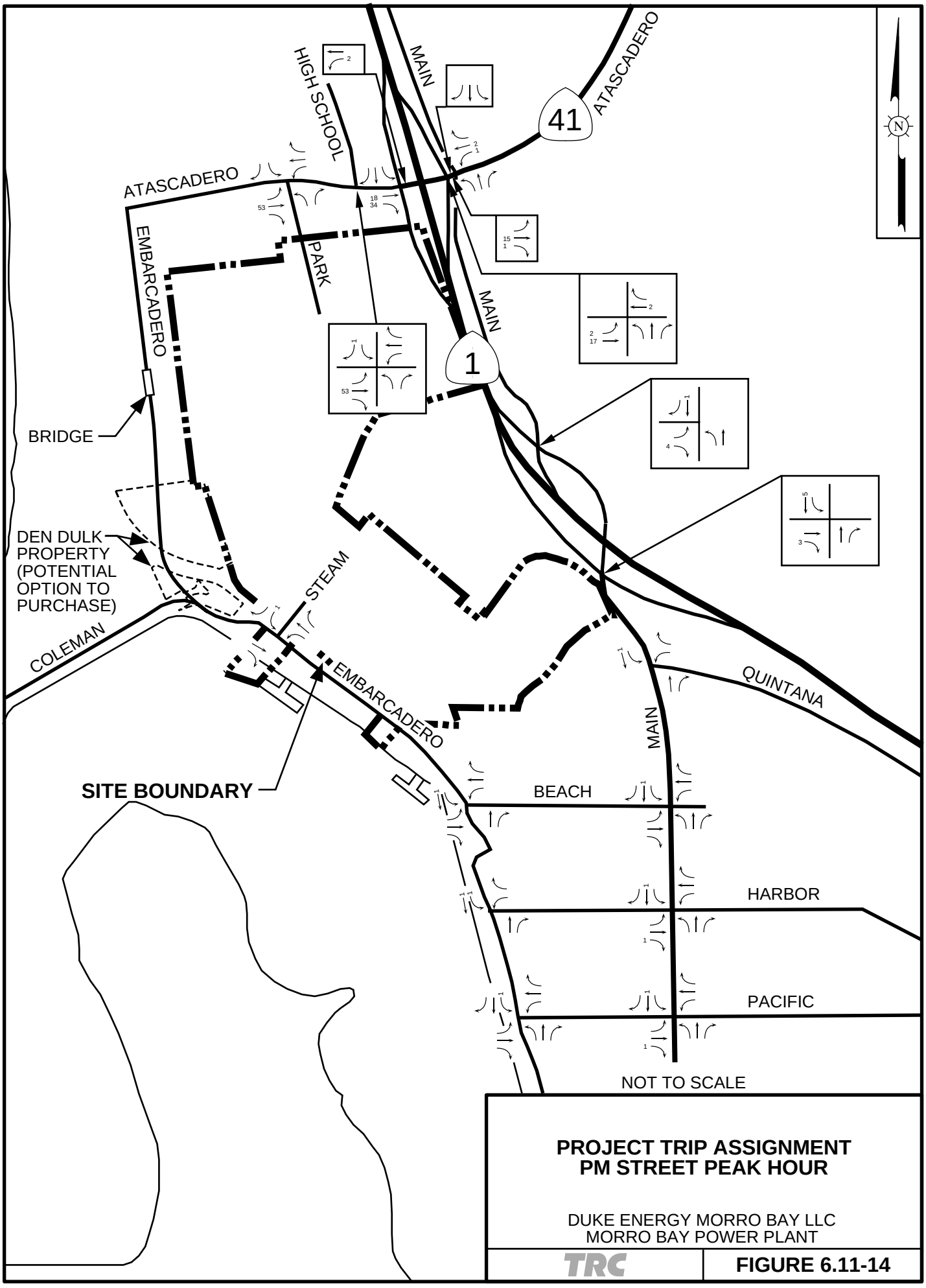


PROJECT TRIP ASSIGNMENTS
AM STREET PEAK HOUR VOLUMES

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-13



PROJECT TRIP ASSIGNMENT
PM STREET PEAK HOUR

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-14

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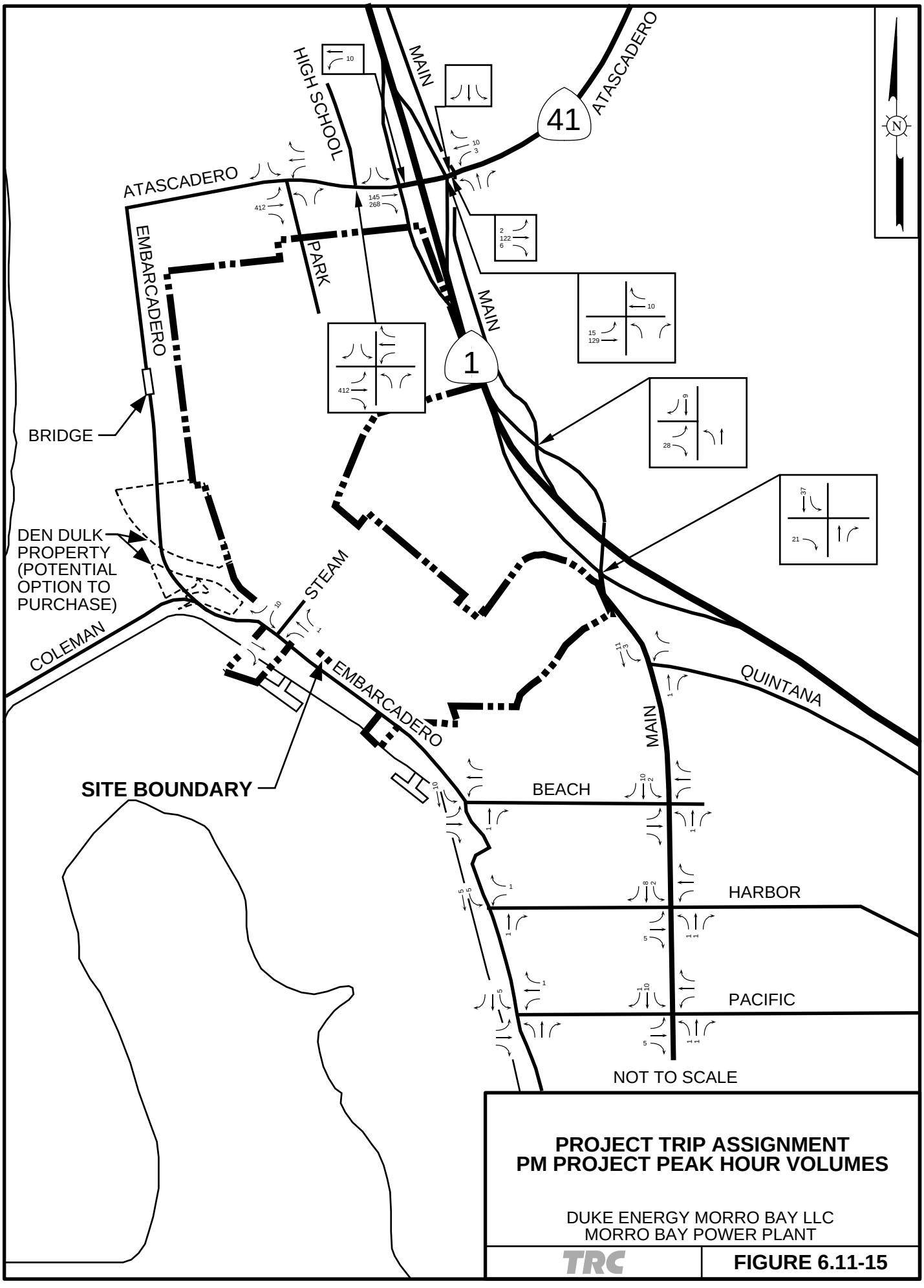
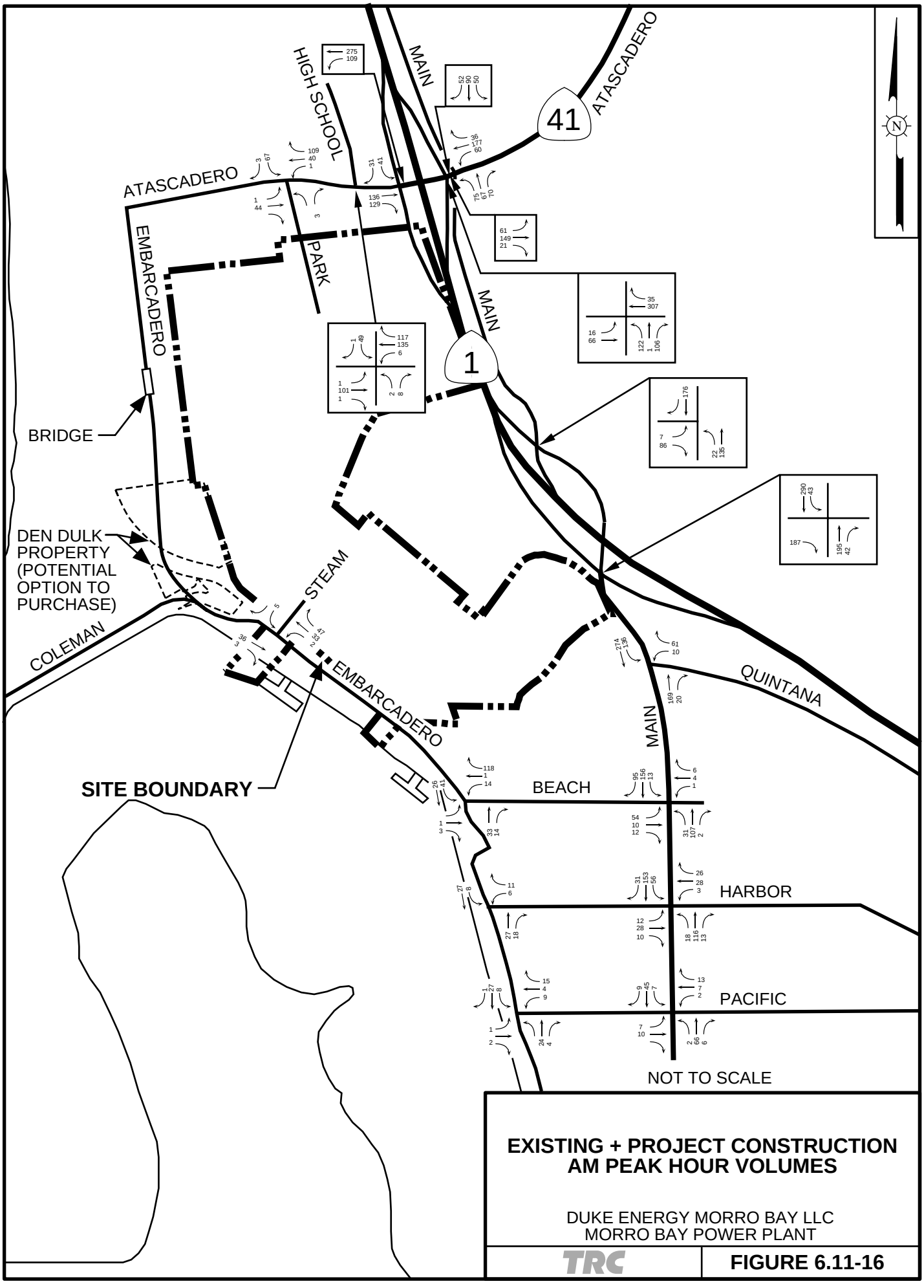


PROJECT TRIP ASSIGNMENT
PM PROJECT PEAK HOUR VOLUMES

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-15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HIGH SCHOOL
MAIN
ATASCADERO
41
ATASCADERO
EMBARCADERO
PARK
MAIN
1
BRIDGE
DEN DULK
PROPERTY
(POTENTIAL
OPTION TO
PURCHASE)
STEAM
COLEMAN
EMBARCADERO
SITE BOUNDARY
MAIN
QUINTANA
BEACH
HARBOR
PACIFIC
NOT TO SCALE
EXISTING + PROJECT CONSTRUCTION
AM PEAK HOUR VOLUMES
DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT
TRC
FIGURE 6.11-16

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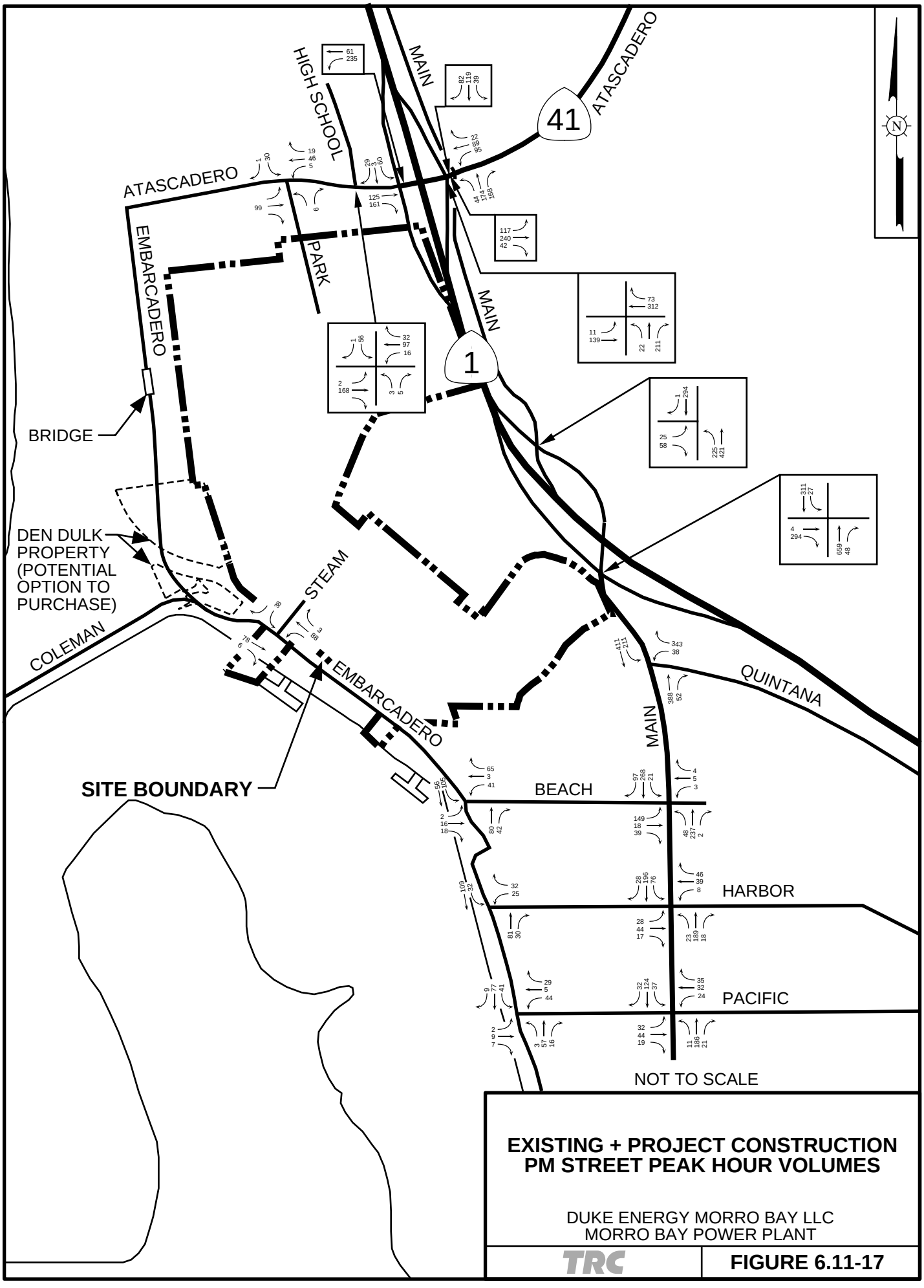

EXISTING + PROJECT CONSTRUCTION PM STREET PEAK HOUR VOLUMES

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-17

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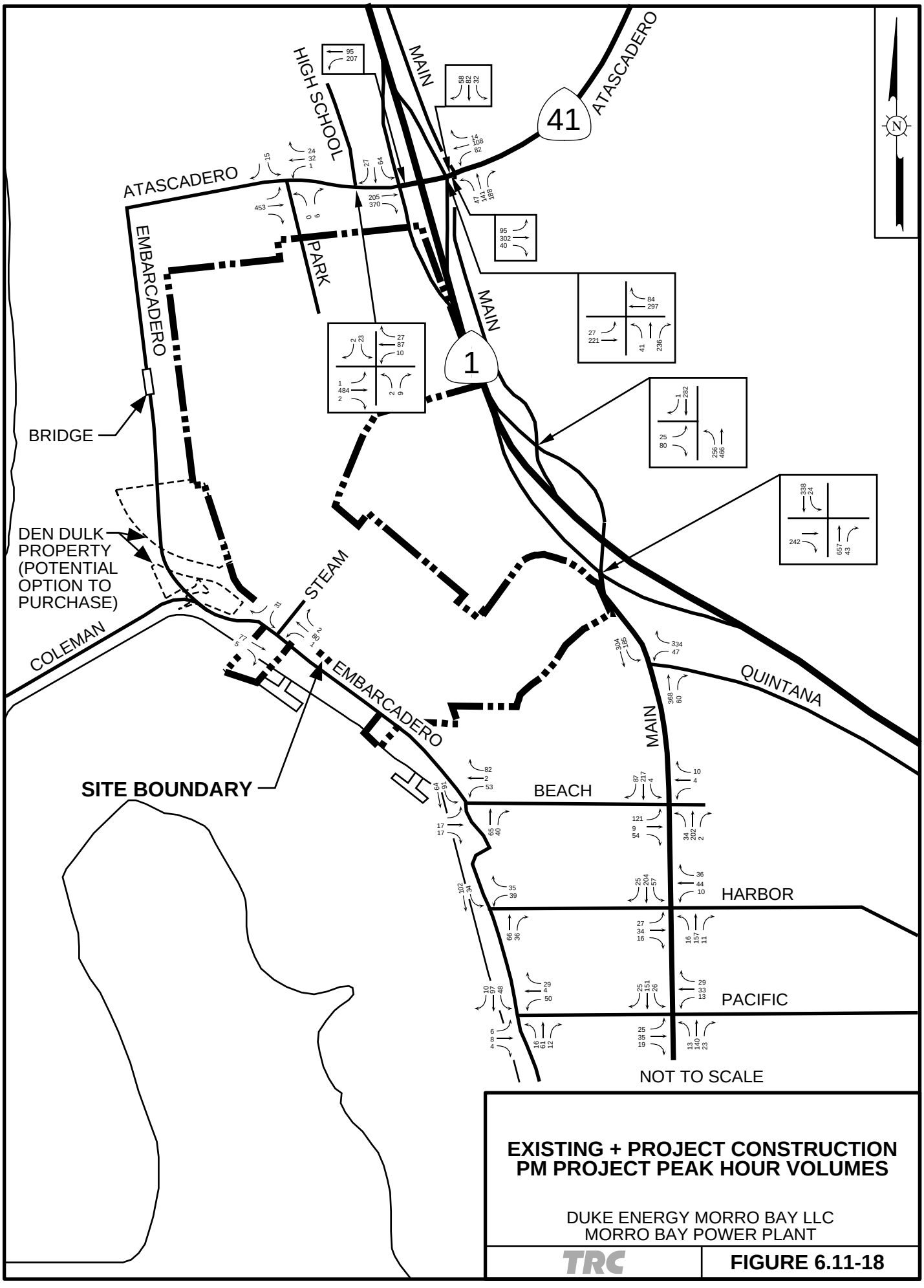

EXISTING + PROJECT CONSTRUCTION
PM PROJECT PEAK HOUR VOLUMES

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-18

TABLE 6.11-6

LEVEL OF SERVICE SUMMARY
EXISTING CONDITIONS AND PROJECT CONSTRUCTION

N-S STREET	E-W STREET	EXISTING LANE CONFIGU-RATION	EXISTING INTERSECTION CONTROL		EXISTING CONDITIONS						EXISTING + PROJECT CONSTRUCTION					
					AM Street		PM Street		PM Project		AM Street		PM Street		PM Project	
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Main Street	Highway 41 (Atascadero Road)	NB EB WB	All-way Stop	Overall	13.2	B	13.9	B	13.3	B	13.5	B	14.3	B	20.5	C
2. Highway 1 Northbound Ramps	Highway 41 (Atascadero Road)	NB SB EB WB	Unsignalized	Overall WM	2.7	A C	1.4	A B	1.7	A B	2.8	A C	1.9	A B	1.9	A B
3. Highway 1 Southbound Ramps	Highway 41 (Atascadero Road)	SB EB WB	Unsignalized	Overall WM	1.4	A C	2.8	A C	2.5	A B	1.5	A C	2.8	A C	3.0	A D
4. Morro Bay High School East Driveway Motel 6	Atascadero Road	NB SB EB WB	Unsignalized	Overall WM	0.9	A B	1.3	A B	0.8	A A	0.9	A B	1.3	A B	0.6	A B
5. Morro Bay High School West Driveway Private Driveway	Atascadero Road	NB SB EB WB	Unsignalized	Overall WM	1.5	A A	1.1	A A	0.7	A A	1.5	A A	0.9	A A	0.3	A B
6. Main Street	Highway 1 Northbound Ramps	NB SB WB	Unsignalized	Overall WM	0.7	A B	1.6	A D	1.7	A D	1.1	A B	1.7	A D	1.8	A D
7. Main Street	Highway 1 Southbound Ramps	NB SB EB	Unsignalized	Overall WM	1.6	A A	1.5	A B	1.2	A B	1.7	A B	1.5	A B	1.3	A B

Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM = Worst Movement

TABLE 6.11-6

LEVEL OF SERVICE SUMMARY
EXISTING CONDITIONS AND PROJECT CONSTRUCTION
(Continued)

N-S STREET	E-W STREET	EXISTING LANE CONFIGU-RATION	EXISTING INTERSECTION CONTROL		EXISTING CONDITIONS						EXISTING + PROJECT CONSTRUCTION					
					AM Street		PM Street		PM Project		AM Street		PM Street		PM Project	
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
8. Main Street	Quintana Road	NB	Signal	Overall	7.6	A	8.5	B	12.9	B	7.6	A	8.5	B	12.9	B
		SB														
		WB		WM												
9. Main Street	Beach Street	NB	All-way Stop	Overall	9.3	A	6.0	A	11.6	B	9.3	A	6.0	A	11.8	B
		SB														
		EB														
		SB														
10. Main Street	Harbor Street	NB	All-way Stop	Overall	9.2	A	3.5	A	9.	A	9.2	A	3.5	A	9.9	A
		SB														
		EB														
		WB														
11. Main Street	Pacific Street	NB	Unsignalized	Overall	1.1	A	2.3	A	1.9	A	1.1	A	2.3	A	1.9	A
		SB														
		EB		WM		B		B		B		A		B		B
		WB														
12. Embarcadero	Beach Street	NB	All-way Stop	Overall	7.9	A	2.2	A	8.7	A	7.9	A	2.2	A	8.8	A
		SB														
		WB														

Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM = Worst Movement

TABLE 6.11-6

LEVEL OF SERVICE SUMMARY
EXISTING CONDITIONS AND PROJECT CONSTRUCTION
(Continued)

N-S STREET	E-W STREET	EXISTING LANE CONFIGU-RATION	EXISTING INTERSECTION CONTROL		EXISTING CONDITIONS						EXISTING + PROJECT CONSTRUCTION					
					AM Street		PM Street		PM Project		AM Street		PM Street		PM Project	
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
13. Embarcadero	Harbor Street	NB	Unsignalized	Overall	0.8	A	1.0	A	1.3	A	0.8	A	1.0	A	1.3	A
		SB														
		WB		WM		A		A		A		A		A		A
14. Embarcadero	Pacific Street	NB	Unsignalized	Overall	1.3	A	1.8	A	2.0	A	1.3	A	1.8	A	2.0	A
		SB														
		WB		WM		A		A		A		A		A		B
15. Embarcadero	Existing Duke Energy Main Entrance	NB	Unsignalized	Overall	0.2	A	0.8	A	0.6	A	0.2	A	0.9	A	0.8	A
		SB														
		WB		WM		A		A		A		A		A		A

HIGHWAY 1 LEVEL OF SERVICE

SEGMENT ON HIGHWAY 1			EXISTING + PROJECT CONDITIONS					
From	To	Direction	AM			PM		
			Volume	Density	LOS	Volume	Density	LOS
Morro Bay Blvd.	Main Street	NB	628	5.4	A	1,087	9.4	A
		SB	1,066	9.2	A	904	10.0	B
Main Street	Highway 41	NB	596	5.2	A	1,206	10.4	B
		SB	1,224	10.6	B	1,399	12.1	B

98-710 Rpts/AFC/Text/Tbls&Figs/Sect 6 (10/21/00/rm)

Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM = Worst Movement

where the MBPP back entrance is located. Note that the MBPP security check point for construction employees will be moved to a point that is well inside the "back" gate (e.g., 100 yards) to avoid the potential for queuing to cause a backup onto Main Street or Highway 1. No significant impacts were found during the morning street peak either, as Project traffic volumes are much lower once the majority of construction employees arrive by 7:00 a.m.

For the p.m. peak, the Project will cause an increase in traffic volumes at the Atascadero Road/Main Street intersection between 5:30 p.m. and 6:00 p.m. While Atascadero Road has very low traffic levels throughout the day, the intersection at Main Street and Atascadero Road operates at LOS C between 4:00 p.m. and 5:00 p.m. Traffic volumes decline slightly between 5:00 p.m. and 6:00 p.m., but the Main Street/Atascadero Road intersection still operates at LOS C during the 5:00 p.m. to 6:00 p.m. hour. Addition of Project traffic during this hour will not constitute a significant impact, since Project traffic will not cause an overall decline in LOS. Nevertheless, the addition of Project traffic after 5:30 p.m. will cause the eastbound approach to this intersection to operate at LOS D for this short time period.

The effects of this very short impact are minimized, however, by several key factors. First, peak Stage II Project traffic will only impact this intersection for about 7 months. This is when Project construction employee volumes will exceed 400 personnel (See Figure 6.11-1). When this short high volume portion of the Stage II construction period ends, traffic volumes at the intersection will decline again and the eastbound approach will operate at LOS C. Second, the peak Project impact only occurs between 5:30 p.m. and 6:00 p.m. This time period is after the rush hour peak (4:00 p.m. to 5:00 p.m.) and is very short in duration. Third, traffic levels at this intersection vary throughout the year. For example, Duke Energy's traffic counts from the summer 1999 at Main/Atascadero, show slightly higher traffic volumes at this location, than the traffic counts taken in May and June of 2000. As a result, the extent of impacts at Main/Atascadero can vary throughout the year, and from year to year. Finally, Duke Energy has agreed to support proposed funding of a traffic officer during the Stage I and II construction periods (see Appendix 6.11-2). The new officer will be present at the Main/Atascadero intersection between approximately 4:00 p.m. and 6:00 p.m., during the Project Stage II construction period. This officer's duties will include temporary traffic management to ease impacts during the street and Project peaks. Details of this officer's duties will be developed in coordination with the City of Morro Bay and presented in the Construction Traffic Management Plan. With the presence of this officer and the other impact reducing factors referred to above, the effects of temporarily adding Project construction traffic to Main/Atascadero will not be significant.

During the 6 months when a second shift will be used during Stage II activities, the second shift will arrive onsite after 6:30 p.m.. A maximum of approximately 250 employees will be present for the second shift (see Figure 6.11-1). The employees will arrive using the MBPP back entrance. Traffic levels at the Main Street/Atascadero Road intersection, and on Main Street near the MBPP back entrance after 6:30 p.m. are low. Nevertheless, a flagman will be available to help manage traffic for the short time period when the second shift arrives. Details of this flagman's responsibilities will be developed in coordination with the City of Morro Bay and presented in the Transportation Management Plan. With the use of the flagman and the fact that a maximum of 250 employees will be arriving for only a 6-month period, short-term impacts will not be significant. Departure of the second shift will be before 6:00 a.m. Traffic volumes on Main Street late at night are extremely low so that impacts will be negligible. Night truck transport, (e.g. after 8:00 p.m.) are planned for Stage II construction, but with very low late night traffic conditions in Morro Bay impacts will not be significant. Deliveries that arrive will use the MBPP back entrance in order to avoid residential areas. Flagmen will be present for temporary traffic management. Details of this flagman's responsibilities will be developed in coordination with the City of Morro Bay and presented in the Construction Traffic Management Plan.

Daytime departures for lunch by about 10 percent of the construction staff were also analyzed to be conservative. Impacts were all far less than the morning and afternoon peaks, and are therefore not considered significant. Similarly, a small allotment for visitors and small deliveries (e.g., United Postal Service, parcel post, office supplies) was made in the modeling. Impacts were again less than for the morning and afternoon project peaks and are therefore not considered significant.

Our traffic analysis also concludes that impacts from Project truck transport will not be significant. Truck transport will be scheduled to avoid peak traffic periods through night deliveries, use of offsite construction support areas or special time window stipulations with vendors. Construction truck transport will use the new, - Morro Creek bridge (see Figure 6.11-10). No deliveries from outside of Morro Bay will be allowed over the new bridge between the hours of 7:00 a.m. and 9:00 a.m. and 4:00 to 5:00 p.m. During this time period, if deliveries cannot be rescheduled, they will be accepted through the PG&E "back" entrance. Occasional use of the PG&E "back" entrance will not alter the impact analysis conclusions due to the temporary nature of this alternate route and generally light traffic conditions throughout the day.

Some delivery traffic will arrive on special vehicles utilized for transport of large items (approximately 100 oversized/heavy deliveries are planned). These vehicles are in excess of normal size, weight and/or length thresholds for roads and highways (California Vehicle Code,

Section 35780; Streets and Highways Code, Sections 117 and 660-711; and CCR 1411.1-1411.6). Based on prior experience at MBP, these vehicles will require a transportation permit from the Highway Patrol before making deliveries to MBPP. It is noted that oversized trucks (those requiring special permits) have the potential to have greater impact on local traffic than do other vehicles. The oversized vehicles can have temporary impacts on traffic flow, sometimes requiring special companion vehicles, lighting, personnel, and/or designated times when they may or may not travel on certain roadways. Those deliveries which occur by oversized truck will receive special permits and, according to prior experience of MBPP, will be scheduled late at night (e.g. after 8:00 p.m. and before 6:00 a.m.) As a result, the use of oversized vehicles will not result in significant impacts to area roadways. Oversized truck traffic will utilize the route shown in Figure 6.11-12.

Hazardous material deliveries for construction and permanent operations will be brought into the PG&E back entrance after exiting from Highway 1 (see Figure 6.11-11 and discussion of types of deliveries in Section 6.15). Hazardous materials arriving from the north or south will be required to use Highway 101, exit at Highway 1 in San Luis Obispo and travel north to the Main Street "back" entrance. Duke Energy has confirmed that Highway 1 is a commonly used route for transportation of hazardous materials (e.g., fuel oil, gasoline, ammonia). Hazardous material deliveries will be prohibited between 8:00 a.m. to 9:00 a.m. and 4:00 p.m. to 5:00 p.m. to avoid local morning and evening rush hour periods. A list of construction and operation hazardous materials, delivery routes and other key information is provided in Table 6.11-7.

Finally, Duke Energy recognizes that construction truck transport may degrade road pavement conditions to some degree. As a result, Duke Energy proposes to develop a procedure in consultation with the Commission, City of Morro Bay and Caltrans to identify preconstruction road conditions and then to make such improvements as are necessary to assure that these roads are maintained in substantially the same condition as they were prior to construction.

Based on these analyses and the temporary nature of Project construction conditions, impacts are not considered significant with implementation of the Project-related scheduling, access route, flagmen and traffic control officer measures described above.

6.11.2.1.3 Stage III Construction Impacts

Stage III construction activities are described in Chapter 2.0 - Project Description of this AFC. Stage III activities will consist of the decommissioning and removal of the existing power building and the three 450-foot tall stacks. The Stage III activities are expected to last 4 years. Work force

TABLE 6.11-7

CONSTRUCTION HAZARDOUS MATERIALS
MORRO BAY POWER PLANT

DESCRIPTION	TOTAL QUANTITY	DELIVERY TRIPS	ROUTE	SPECIAL HAZARDS (if any)
Major Equipment Consumables (nonroad fuels) • Gasoline • Diesel Fuel • Motor Oil	37,200 gallons Subtotals • 25,000 gallons • 12,000 gallons • 200 gallons	30	See Figure 6.11-11.	None. All hazardous materials delivered to the site during construction will be via U.S. Department of Transportation (DOT), CALTRANS and California Highway Patrol approved methods and routes.
Concrete Form Sealer	700 gallons	2	See Figure 6.11-11	None. All hazardous materials delivered to the site during construction will be via U.S. DOT, CALTRANS and California Highway Patrol approved methods and routes.
Cold Galvanized Spray 16 ounce Canisters	50 each	1	See Figure 6.11-11.	None. All hazardous materials delivered to the site during construction will be via U.S. DOT, CALTRANS and California Highway Patrol approved methods and routes.
Lubricants Lubricants	200 gallons 150 pounds	2 2	See Figure 6.11-11.	None. All hazardous materials delivered to the site during construction will be via U.S. DOT, CALTRANS and California Highway Patrol approved methods and routes.
Paints (Primers)	1,000 gallons	12	See Figure 6.11-11.	None. All hazardous materials delivered to the site during construction will be via U.S. DOT, CALTRANS and California Highway Patrol approved methods and routes.
Fiber Glass - Roll/Board	500,000 square feet	4	See Figure 6.11-11.	None. All hazardous materials delivered to the site during construction will be via U.S. DOT, CALTRANS and California Highway Patrol approved methods and routes.
Compressed Gases • Oxygen • Acetylene • Argon • Welding Rod	 60 cylinders 40 cylinders 30 cylinders 1,500 pounds	 7 7 4 7	See Figure 6.11-11.	None. All hazardous materials delivered to the site during construction will be via U.S. DOT, CALTRANS and California Highway Patrol approved methods and routes.

98-710/AFC Text/Sect 6/Tbls&Figs (10/21/00/rm)

levels for Stage III will, average about 50 employees arriving each day for a single construction shift which will start at 8:00 a.m. and end at 5:00 p.m. Peak Stage III activities will occur during two periods as the pump house for cooling water intake is redesigned and the three 450-foot tall stacks are removed. Each of these periods is expected to last a little less than a year, and construction work force levels of these times will be just under 100. The Stage III construction personnel will use the main MBPP entrance and park in a designated contractors' area onsite. As described in Section 6.11.3.3 above, MBPP maintenance activities, which occur every 2 or 3 years, currently involve up to 300 additional construction employees for approximately a 2 to 3 month period. The most recent maintenance period occurred in the spring of 2000. These employees also used the main MBPP gate. Field observations of these spring 2000 maintenance activities indicated that traffic impacts were negligible. Current traffic conditions in Morro Bay are generally very good, with LOSs of A or B through the central Morro Bay area. Addition of an average of only 50 employees each day will not degrade these levels of service in Morro Bay. As a result, impacts from the 100 or less Stage III construction crew will not be significant.

Stage III delivery truck activity is expected to average about 10 to 15 deliveries a day . These trucks will use the MBPP back entrance and will be scheduled, to avoid peak Main Street peak traffic periods (e.g., 8:00 a.m. to 9:00 a.m. and 4:00 p.m. to 5:00 p.m.) or for night deliveries. As a result, traffic impacts for Stage III delivery trucks will not be significant.

6.11.2.1.4 Additional Considerations

Rail Transport

Due to the absence of direct rail service to the City of Morro Bay, only limited number of rail deliveries are planned. At present, only heavy haul or oversized equipment (turbines, generators, transformers) will arrive by train. These deliveries will be stored if necessary at private rail storage areas before transport to the site. When the equipment is needed at the site it will be transported to the site by truck late at night (e.g. after 8:00 p.m. and before 6:00 a.m.) under special permit from the California Highway Patrol, resulting in no impacts to Highway 1 or Morro Bay traffic. The heavy equipment route is shown in Figure 6.11-12.

The impact to the Union Pacific Railroad system will not be significant. A maximum of 20 to 30 train trips for MBPP deliveries during the 21-month Project Stage II construction period will not interfere with the existing schedule. The Union Pacific railline extending through San Luis Obispo has low freight traffic volumes and is used only a few times per month.

Businesses and Residences

Questions were raised during public workshops regarding potential impacts to businesses and residents from Project construction. A key goal during construction planning has always been to avoid or minimize to the greatest extent possible, impacts to businesses and residents. Indeed, key traffic and transportation mitigation measures have been incorporated into the Project including: use of offsite construction support areas, late night deliveries, designated access routes, special shift scheduling, construction of a bridge across Morro Creek and support of proposed funding of a traffic officer. These measures are each designed in large part to allow Project construction to proceed with little or no effect on central Morro Bay business district streets or residential streets. The details of these design features are described in Section 6.11.2.1 above.

Based on addition of these features, traffic impacts to businesses and residents during construction are expected to be minimal. Further, impacts to businesses and residents from MBPP permanent operations traffic will be similar to or better (especially due to scheduling at truck transport and the new designated access routes) than has occurred for the last 50 years and will not be significant.

Tourist Season/Beach Access

Questions were also raised during public meetings regarding impacts to tourist traffic and beach access during Project construction and permanent operations. It is not anticipated that Project construction will be scheduled to occur on Sundays or holidays. Duke Energy performed Saturday traffic counts at key project intersections in the summer of 1999, the spring 2000, and Friday evening and Saturday traffic counts at key Project intersections for the Car Show and Memorial Day weekends in 2000 (see Appendix 6.11-1). These counts were performed in response to public questions about these issues. Since this traffic analysis is already based on summer weekday counts, it was believed that any further chance to affect tourists is on summer weekends and holidays.

The results of the counts indicate that traffic volumes on summer Saturdays and Holiday weekends at 6:30 a.m. to 7:30 a.m. on Main Street near the site "back" entrance are even lower than during weekdays (very little traffic at that time). These counts demonstrate that morning inbound construction employees will have no effects on local weekend or holiday traffic. Similarly, traffic counts taken on summer Saturdays and holiday weekends between 3:00 p.m. and 6:00 p.m. at Atascadero Road/Main Street were found to be the same or lower than at that same time and

location on weekdays. These counts demonstrate that evening outbound construction employees on Atascadero Road will not have significant impacts on this location based on the factors described in Section 6.11.2.1.2.3 above.

Higher traffic volumes were encountered, however, at the Atascadero Road/Main Street intersection on the Friday afternoon (between 3:00 p.m. and 6:00 p.m.) before the Memorial Day holiday weekend. But while traffic volumes were found to be higher, the LOS for the Atascadero/Main Street intersection was still "C," same as normal Fridays, and the addition of Project traffic did not cause a drop in the LOS designation. The effects of this very short impact are minimized by the same factors described in Section 6.11.2.1.2.3.

A final issue for tourist impacts is the effect of Project construction truck transport traffic on tourist traffic movements. Project impacts holiday weekends will be minimized in the same way that impacts will be minimized throughout the year. Truck transport will be scheduled to avoid peak street traffic periods through use of offsite construction support areas or agreements with vendors. Where uncertainty exists about site arrival times, nighttime deliveries will be scheduled.

Second, compared to the Embarcadero area, tourist activities on Atascadero Road contribute very low traffic volumes. With an average of only four construction-related deliveries a day for the 21-month construction period, and comparatively low tourist traffic volumes on Atascadero Road, Project deliveries are not expected to cause significant impacts to tourism in this location. Even to the extent that busy delivery days occur deliveries will be scheduled to avoid peak periods during

Tourists and local residents will also want to continue to access the beach during Project construction. Beach access near the MBPP can come from two directions: Atascadero Road to Embarcadero Road to the beach in front of the recreational vehicle park; or Embarcadero Road from the central business district south of MBPP to the beach in front of MBPP (sometimes known as "the pit").

Project construction will cause increased construction-related traffic to be present on Atascadero Road throughout the day, Monday through Saturday. This traffic will be entering and exiting the Project site using the new bridge across Morro Creek.

The increased traffic on Atascadero Road will average six trucks per day throughout the 21-month construction period. While high-volume delivery periods will occur from time to time, traffic will be scheduled to be spread throughout the day and therefore will not act as a barrier to beach access.

Furthermore, the presence of trucks will not be a deterrent, since this road is currently used by a gravel operator and a sewage treatment plant that both have operating facilities on Atascadero Road.

Finally, a high traffic volume period will occur on Atascadero Road/Embarcadero Road each day as Project construction employees exit the site between 5:30 p.m. and 6:00 p.m. Impacts to beach access or tourism in general in the area from this very short high-volume period are not expected to be significant mainly because the Project traffic will be traveling away from the beach. In addition, the beach will be on the non-Project traffic side of Embarcadero Road so that arriving beach goers will not be affected. Once this short-duration (30 to 45 minutes) high-volume period is over, beach access will be readily available, and the same as it is throughout the day. Note that the night shift will arrive between 6:30 p.m. and 7:30 p.m. for a six month period. This night shift will enter the site using the "back" entrance on Main Street and will not affect tourist traffic on Atascadero Road.

Much lower Project traffic volumes will arrive from south of MBPP on Embarcadero to use the main site entrance (Stages I and III). As a result, little impact to beach access from Embarcadero Road south of MBPP is expected. The area near Morro Creek could be affected; however during the Stage II construction activities, as this location will include a new bridge and construction access road. Duke Energy will work with the City of Morro Bay to assure that this construction access road does not substantially restrict beach access in the area through the use of a flagman. This approach has been used successfully at Diablo Canyon at the end of shifts as employees leave the plant. Details of the flagman's duties will be developed in coordination with the Commission and the City of Morro Bay and presented in the Traffic Management Plan

Bicycle Traffic

As described in Section 6.11.1.3.2 above, a recently constructed bicycle path is located immediately behind MBPP adjacent to Highway 1. The path begins approximately near the MBPP "back" entrance and continues to the recreation areas across from the High School on Atascadero Road. Duke Energy performed a user count for this newly constructed bikeway in the spring of 2000. The count was performed between 3:00 p.m. and 6:00 p.m. on a school day (see attached technical report in Appendix 6.11-1). Though the High School was in session, the count indicated that the pathway currently has low use, with only 5 to 10 bicyclists/hour, counted in an afternoon between 2:00 p.m. and 6:00 p.m. This usage may be different at other times of the day, and it also may increase as more bicyclists become aware of this new route. Consequently, Duke Energy will install, in coordination with the City of Morro Bay, new signs along the pathway especially near the "back" entrance to MBPP and at Atascadero Road. The signs will advise riders of the temporary

increase in construction traffic and urge caution when crossing streets. In addition, Duke Energy will work with the City of Morro Bay to monitor conditions on bike paths in the area to determine if further cautionary steps are needed.

The new bicycle routes shown in Figure 6.11-4 will not be affected by Project construction as the new bike paths are scheduled for construction after completion of the Project.

Construction Support Areas

Duke has initiated discussions with land owners outside of Morro Bay to identify potential construction support areas for use during the Stage II construction activities. This work has focused on areas that:

- Are outside of developed urban areas
- Are in areas not zoned residential or commercial
- Have easy access to Highway 1
- Do not include roads or intersections where truck transport traffic will substantially degrade levels of service

It is anticipated that the agreements to use offsite construction support areas will be coordinated with the start of construction, scheduled to begin in late 2001 or early 2002.

The construction support areas serve two purposes (1) they will assist Duke construction managers in the scheduling of deliveries of equipment and materials to the MBPP site for assembly of the new combined cycle units; and (2) they will reduce traffic impacts on Morro Bay streets. Material and equipment, arriving from various out-of-town destinations, will be delivered to the construction support areas and stored for a period of weeks or months and then scheduled for delivery in stages to temporary onsite MBPP lay down areas when needed. Up to approximately 20 deliveries could arrive at these locations in a day.

Use of these construction support areas will benefit the Morro Bay area and Duke Energy because they will provide the mechanism for Duke construction managers to schedule deliveries during our peak traffic periods on Morro Bay streets.

Additional Support for Local Traffic Management

The City of Morro Bay has raised concerns about potential impacts the Project may have at the Main Street/Atascadero Road intersection. Based on the results the traffic analysis contained in this

Section, no impacts are created at this or other key intersections, and therefore no mitigations are required for this Project related to traffic. Notwithstanding this analysis, and to further facilitate overall traffic management, general circulation improvement, and improved recreational and coastal access, Duke Energy proposes to fund a traffic improvement program as part of the Commission licensing process in an amount of $250,000. Details of this proposed funding are provided in Appendix 6.11-2. These funds are being proposed as being available for further improvement to traffic flow around the Project Site either during or after the duration of the Project.

Duke Energy proposes that the use of funds be directed to their best use by the Commission in consultation with the City of Morro Bay, and that they be a condition of the licensing process to address traffic impact fees or actual traffic impacts. Furthermore, Duke Energy proposes that no programs be funded or initiated that impact the construction timetables associated with this Project.

6.11.2.2 Operations and Maintenance Impacts

The Project will not result in any new permanent employees in addition to the existing MBPP staff. As a result no new permanent employee impacts will occur on Morro Bay streets from future MBPP operations. The Project will also not result in increased volumes of truck transport activity for long-term operation of the MBPP. A list of operations and maintenance hazardous material deliveries, routes and other key associated information is shown in Table 6.11-6. Based on Since future operations and maintenance activities level will be equivalent to current MBPP conditions, overall impacts for future MBPP operations and maintenance activities are not considered significant.

For future ongoing operations, the Project will require truck shipments of aqueous ammonia that will be used to reduce nitrogen oxide emissions by selective catalytic reduction (SCR) technology applied to both the new combined-cycle units. A detailed discussion of these activities is provided in Section 6.15. The trucks will exit Highway 1 at Main Street and enter MBPP through the back gate. This route that minimizes movement of the trucks transporting hazardous materials to MBPP through commercial or residential streets in the City of Morro Bay (see Figure 6.11-11). The trucks used to transport aqueous ammonia will carry a maximum of 8,000 gallons of 29.4 percent by weight solution of ammonia in water. Aqueous ammonia is not subject to special transportation restrictions under the California Vehicle Code.

Trucks used to transport aqueous ammonia are subject to design requirements that assure their integrity to hold the material without leaking. These requirements are specified in 49 Code of Federal Regulations (CFR) Sections 171-180. These trucks are also subject to regular safety and

integrity inspection according to the requirements of the California Department of Transportation (Caltrans) (Fuz, 1999). The Enforcement Services Division of the California Highway Patrol is responsible for enforcing the hazardous materials regulations; approximately 300 officers are specially trained in and assigned to on-highway commercial vehicle enforcement activities.

Aqueous ammonia is routinely transported by tank truck all over the United States, especially for its use as a fertilizer in farming where anhydrous ammonia is often used. Each day, tens of thousands of gallons are transported in southern and central California.

6.11.2.3 Cumulative Impacts

Section 6.1 identifies a list of local projects provided by the City of Morro Bay and the County which could potentially have a cumulative impact on traffic in the area when combined with Project traffic. This list is repeated in Table 6.11-8 for convenience. Anticipated trip generation information shown in Table 6.11-8 is also provided based on estimates from the City of Morro Bay. The locations of the pending projects are shown in Figure 6.11-19. Though the actual dates of construction are not known for many of these pending projects, it is assumed as a worst case that they will all occur during the 6-year Project construction period. Further, as a worst case, peak traffic impacts from Stage II construction activities are used in the cumulative modeling, even though these Stage II impacts will only occur for 6 to 7 months, instead of the entire 6-year Project construction period. No modeling for long term Project operations was performed since those volumes are expected to be equivalent to current operations.

Table 6.11-9 provides a level of service summary for the cumulative projects listed in Table 6.11-8. Figures 6.11-20 and 6.11-21 and 6.11-22 show street volumes for the cumulative impact scenario which include the existing, Project and cumulative traffic distributions. As shown in Table 6.11-8, overall levels of service will not change under the cumulative impact scenario except for the Main/Atascadero intersection. There, the overall LOS will drop to D. This is not considered significant, however, due to the relatively short duration of this impact (6 to 7 months for the Stage II impacts) since the impact only occurs when Project Stage II workforce levels exceed 400 during the day shift.

Of the San Luis Obispo County projects identified in Section 6.1 as having the potential for cumulative impacts, only the Cuesta Grade improvement was determined to have the potential to contribute substantially to cumulative traffic. This is because some traffic on Highway 101 could choose to avoid the Cuesta Grade area and take Highway 41/Highway 1 as an alternate route.

TABLE 6.11-8

CUMULATIVE PROJECT LIST AND TRIP GENERATION

MAP NO.	PROJECT NUMBER/ NAME	SIZE/UNIT	STATUS	TRIP GENERATION		
				ADT	P.M. PNT	A.M. PNT
1	RV Campground	NA	Pending	NA	NA	NA
2	Cloisters Tract	1,120 DU	Approved	1,148	121	90
3	Fiber Optic Cable Landing	NA	Pending	NA	NA	NA
4	North Point Tract	10 DU	Approved	96	10	8
5	Colmer Tract	36 DU	Pending	345	36	27
6	Sequoia Apartments	12 DU	Completed	80	7	6
7	Rock'n Burger	1,736 SF	Pending	689	58	--
8	Steinman Building	8,854 SF	Pending	360	23	--
9	Commercial Warehouse/Office	3,528 SF	Pending	39	5	5
10	Measure F Housing Units - North	49 DU	Approved	469	49	37
11	Measure F Housing Units - South	21 DU	Approved	201	21	16
12	Inn at Morro Bay	10 Room	Approved	522	31	10
13	Day Apartments	12 DU	Withdrawn	80	7	6
14	Burnside Apartments	4 DU	Approved	27	3	2
15	Teen Center	900 SF	Pending	31	3	2
16	Mini Storage	12,280 SF	Pending	345	36	27
			Total	4432	410	236

98-710 Rpts/AFC/Text/Tbls&Figs/Sect 6 (10/21/00/rm)

TABLE 6.11-9

CUMULATIVE PROJECT
LEVEL OF SERVICE SUMMARY

N-S STREET	E-W STREET	EXISTING LANE CONFIG-URATION	EXISTING INTERSECTION CONTROL		EXISTING CONDITIONS						CUMULATIVE CONDITION					
					AM STREET		PM STREET		PM		AM		PM		PM	
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Main Street	Highway 41 (Atascadero Road)	NB 1-L/T, 1-R SB 1-L/T, 1-R EB 1-L, 1-T/R WB 1-L, 1-T/R	All-way Stop	Overall	13.2	B	13.9	B	13.3	B	15.4	C	15.6	C	25.6	D
2. Highway 1 Northbound Ramps	Highway 41 (Atascadero Road)	NB 1-L/T, 1-R EB 1-L/T WB 1-T/R	Unsignalized	Overall	2.7	A	1.4	A	1.7	A	3.0	A	1.7	A	2.2	A
				WM		C		B		B		C		B		C
3. Highway 1 Southbound Ramps	Highway 41 (Atascadero Road)	SB 1-L/T, 1-R EB 1-T, 1-R WB 1-L/T	Unsignalized	Overall	1.4	A	2.8	A	2.5	A	1.8	A	3.1	A	3.6	A
				WM		C		C		B		C		C		E
4. Morro Bay High School East Driveway Motel 6	Atascadero Road	NB 1-L, 1-T/R SB 1-L, 1-T/R EB 1-L/T WB 1-L/T, 1-R	Unsignalized	Overall	0.9	A	1.3	A	0.8	A	1.0	A	1.2	A	0.6	A
				WM		B		B		A		B		B		B
5. Morro Bay High School West Driveway Private Driveway	Atascadero Road	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	Unsignalized	Overall	1.5	A	1.1	A	0.7	A	1.4	A	0.9	A	0.3	A
				WM		A		A		A		B		A		B
6. Main Street	Highway 1 Northbound Ramps	NB 1-L, 1-T SB 1-T/R EB 1-L, 1-R	Unsignalized	Overall	0.7	A	1.6	A	1.7	A	1.2	A	1.8	A	1.9	A
				WM		B		D		D		B		D		D
7. Main Street	Highway 1 Southbound Ramps	NB 1-T/R SB 1-L, 1-T EB 1-L/T/R	Unsignalized	Overall	1.6	A	1.5	A	1.2	A	1.9	A	1.7	A	1.5	A
				WM		A		B		B		B		B		B

Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM = Worst Movement
* = Out of Range (greater than 5 minutes)

TABLE 6.11-9

CUMULATIVE PROJECT
LEVEL OF SERVICE SUMMARY
(Continued)

N-S STREET	E-W STREET	EXISTING LANE CONFIG-URATION	EXISTING INTERSECTION CONTROL		EXISTING CONDITIONS						CUMULATIVE CONDITION					
					AM STREET		PM STREET		PM		AM		PM		PM	
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
8. Main Street	Quintana Road	NB 1-T, 1-R SB 1-L, 1-T WB 1-L, 1-R	Signal	Overall	7.6	A	8.5	B	12.9	B	8.0	A	9.0	B	13.2	B
				WM												
9. Main Street	Beach Street	NB 1-L, 1-T, 1-R SB 1-L, 1-T, 1-R EB 1-L/T, 1-R WB 1-L/T, 1-R	All-way Stop	Overall	9.3	A	6.0	B	11.6	B	9.8	A	6.9	A	12.6	B
10. Main Street	Harbor Street	NB 1-L, 1-T/R SB 1-L, 1-T/R EB 1-L/T/R WB 1-L/T/R	All-way Stop	Overall	9.2	A	3.5	A	9.8	A	9.6	A	3.9	A	10.3	B
11. Main Street	Pacific Street	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	Unsignalized	Overall	1.1	A	2.3	A	1.9	A	1.3	A	2.6	A	2.1	A
				WM		A		B		B		B		B		B
12. Embarcadero	Beach Street	NB 1-L/T, 1-R SB 1-L, 1-T/R EB 1-L/T/R WB 1-L/T, 1-R	All-way Stop	Overall	7.9	A	2.2	A	8.7	A	7.9	A	2.3	A	8.9	A
13. Embarcadero	Harbor Street	NB 1-T/R SB 1-L/T WB 1-L/T/R	Unsignalized	Overall	0.8	A	1.0	A	1.3	A	0.9	A	1.1	A	1.4	A
				WM		A		A		A		A		A		A
14. Embarcadero	Pacific Street	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	Unsignalized	Overall	1.3	A	1.8	A	2.0	A	1.2	A	1.9	A	2.1	A
				WM		A		A		A		A		A		B
15. Embarcadero	Existing Duke Energy Main Entrance	NB 1-L/T/R SB 1-L/T, 1-R EB 1-L, 1-T/R WB 1-L/T/R	Unsignalized	Overall	0.2	A	0.8	A	0.6	A	0.2	A	0.8	A	0.8	A
				WM		A		A		A		A		A		A

Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM = Worst Movement
* = Out of Range (greater than 5 minutes)

TABLE 6.11-9

CUMULATIVE PROJECT
LEVEL OF SERVICE SUMMARY
(Continued)

HIGHWAY 1 LEVELS OF SERVICE

SEGMENT ON HIGHWAY 1			EXISTING CONDITIONS						CUMULATIVE CONDITIONS					
From	To	Dir.	AM			PM			AM			PM		
			Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
Morro Bay Blvd.	Main Street	NB	577	5.0	A	1,059	9.2	A	657	5.7	A	1,121	9.7	A
		SB	1,046	9.1	A	904	8.3	A	1,083	9.4	A	1,174	10.2	B
Main Street	Highway 41	NB	596	5.2	A	1,206	10.4	B	648	5.6	A	1,254	10.9	B
		SB	1,199	10.4	B	1,121	9.7	A	1,248	10.8	B	1,428	12.4	B

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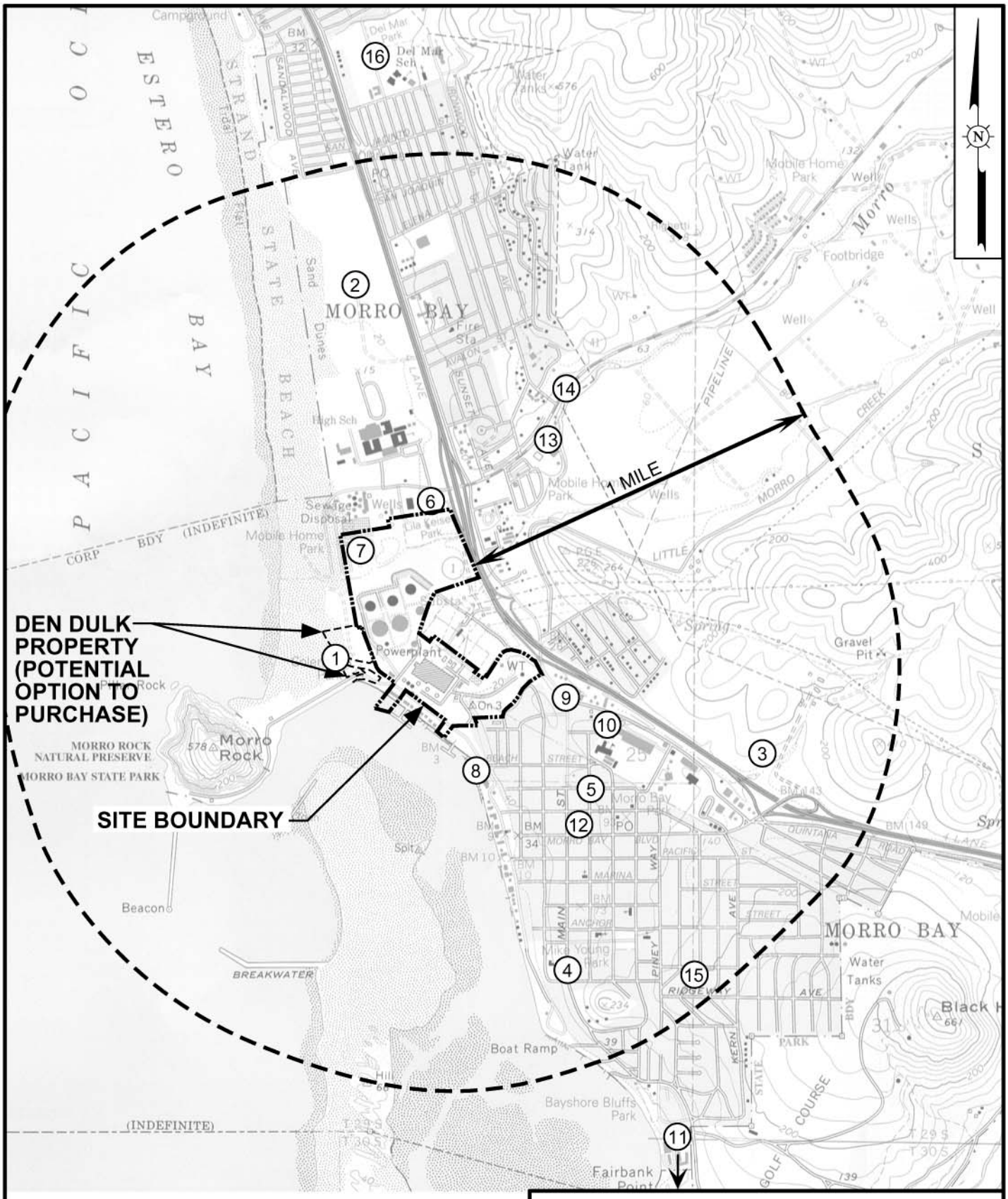
Notes: L, T, R = Left, Through, Right
NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
WM = Worst Movement
* = Out of Range (greater than 5 minutes)

98-710RAFC-55 REV.10/20/00



0 2,000 4,000 FEET

SCALE

SOURCES: USGS 7.5 MINUTE TOPOGRAPHIC MAP OF MORRO BAY NORTH AND MORRO BAY SOUTH, CALIFORNIA DATED 1993 AND 1994.

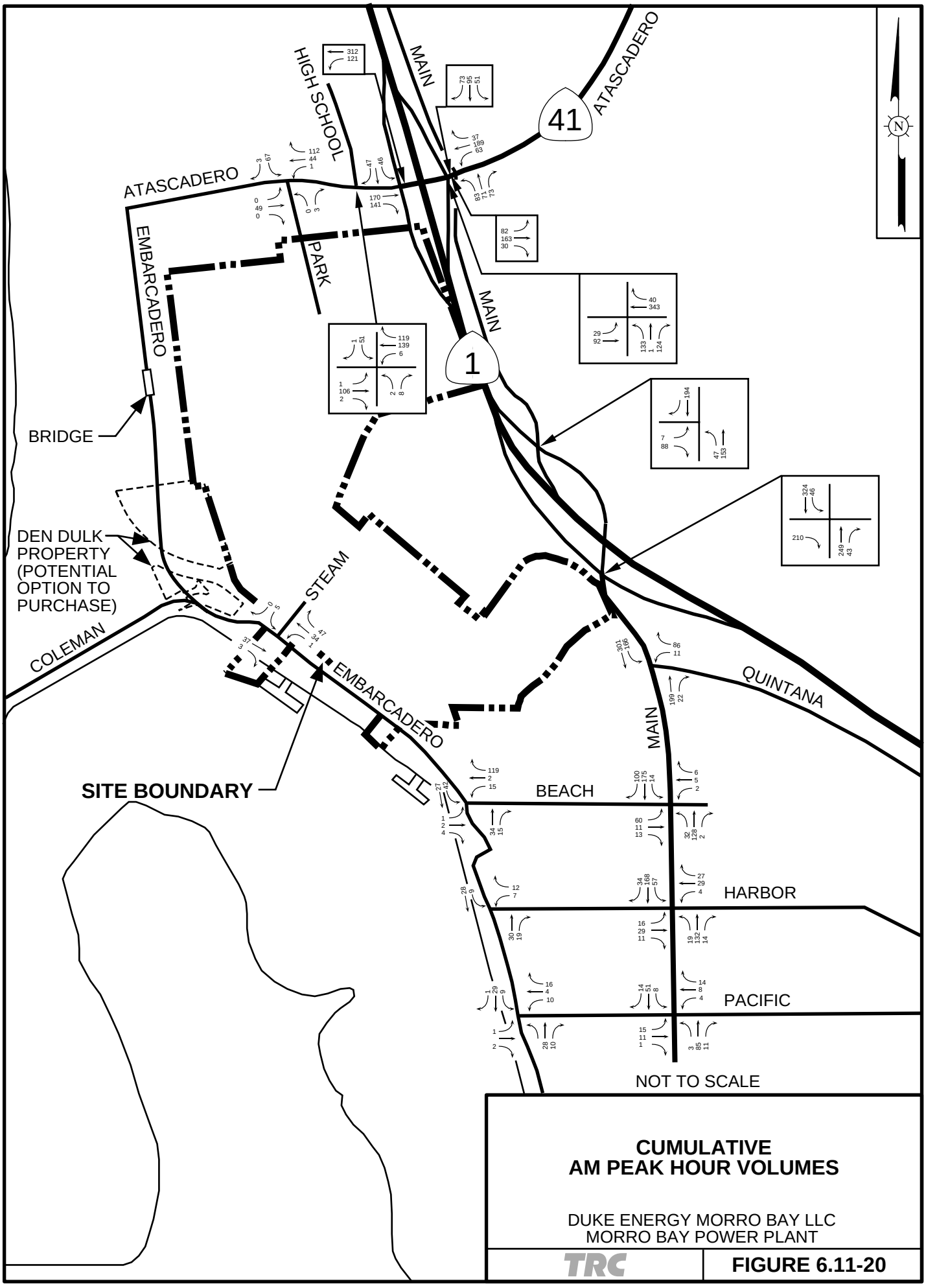
CUMULATIVE PROJECTS CITY OF MORRO BAY

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-19

98-710RAFC-56 REV.10/20/00

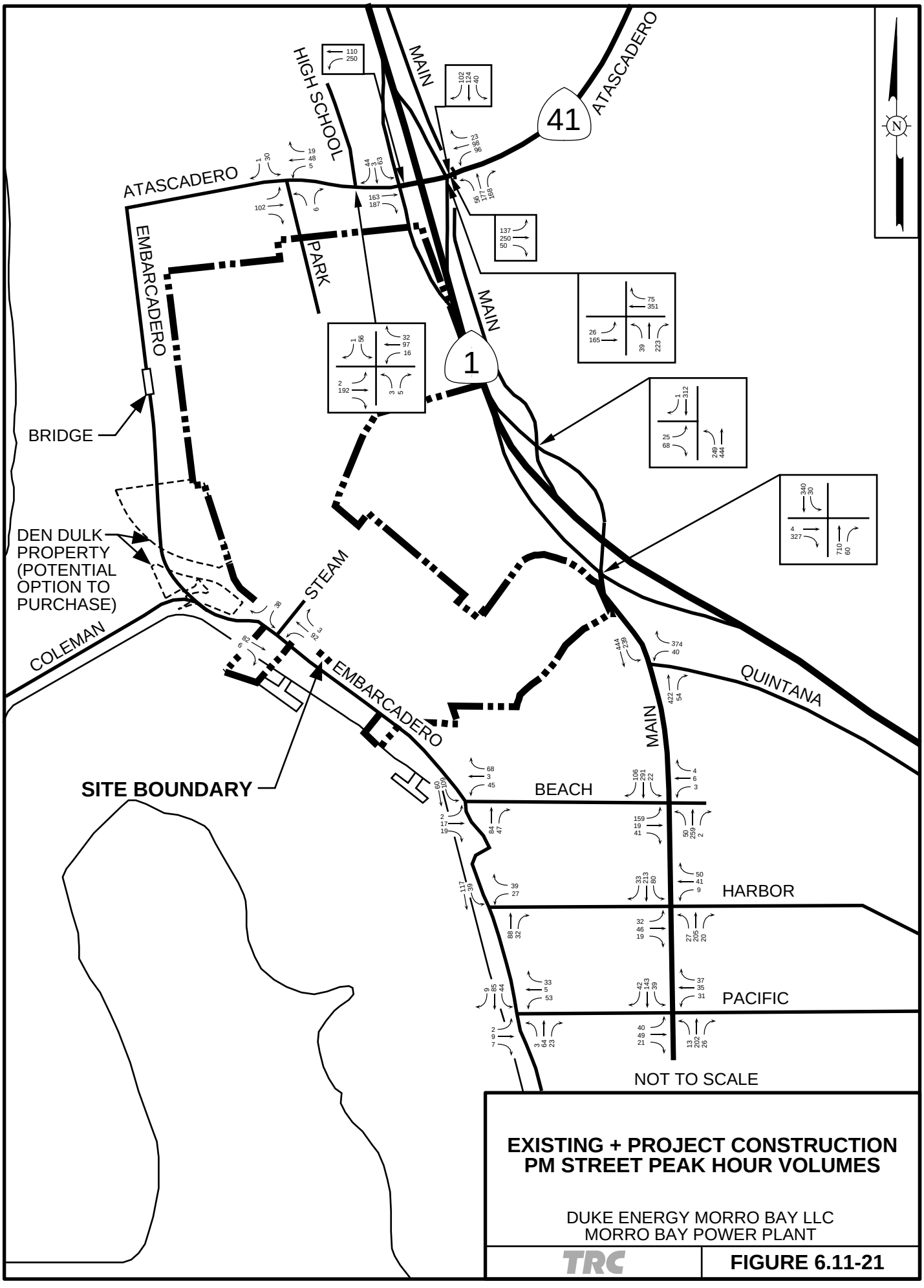


CUMULATIVE AM PEAK HOUR VOLUMES

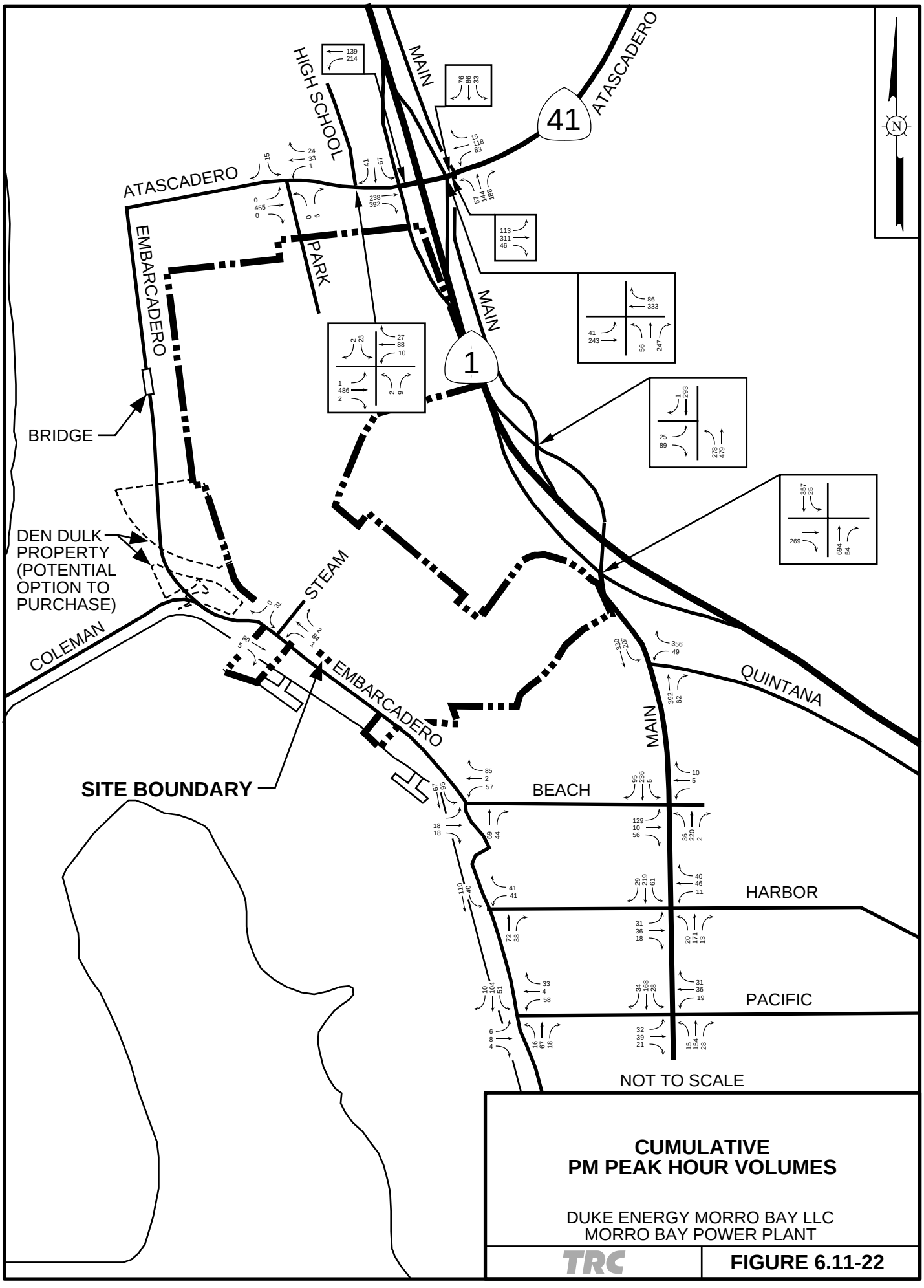
DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-20


98-710RAFC-152 REV.10/20/00
HIGH SCHOOL
MAIN
ATASCADERO
41
ATASCADERO
EMBARCADERO
PARK
MAIN
1
BRIDGE
DEN DULK PROPERTY (POTENTIAL OPTION TO PURCHASE)
STEAM
COLEMAN
EMBARCADERO
SITE BOUNDARY
MAIN
QUINTANA
BEACH
HARBOR
PACIFIC
N
NOT TO SCALE
EXISTING + PROJECT CONSTRUCTION
PM STREET PEAK HOUR VOLUMES
DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT
TRC
FIGURE 6.11-21

98-710RAFC-57 REV.10/20/00



CUMULATIVE
PM PEAK HOUR VOLUMES

DUKE ENERGY MORRO BAY LLC
MORRO BAY POWER PLANT

TRC

FIGURE 6.11-22

However, based on Caltrans construction procedures described below and the fact that no traffic increases have been measured in traffic counts at Main Street/Atascadero Road since September 1999 when the Cuesta Grade project began, (compare Main Street/Atascadero Road traffic counts from the spring 1999 and the spring/summer 2000 in Appendix 6.11-1) impacts to the Morro Bay area are not expected to be significant (Newland, 1999). The Caltrans construction procedures are designed to assure no permanent lane closures during the Cuesta Grade construction. Two southbound lanes will remain open during morning hours (6:00 a.m. to 9:00 a.m.) when traffic is heaviest in that direction. Likewise, two northbound lanes will be open during evenings (3:00 p.m. to 6:00 p.m.), when traffic is heaviest in that direction. During construction, a concrete barrier will divide northbound and southbound traffic. Tow trucks are on station during peak travel times to quickly move disabled vehicles out of traffic.

Because of these Caltrans measures, Caltrans does not expect a significant diversion of traffic onto Highway 41 (or other east-west routes in the vicinity), and then onto Highway 1. The traffic counts performed in the spring 2000 support this conclusion. Further, Caltrans has indicated that because Highway 41 is a winding two-lane highway that does not have sufficient capacity to be a good alternate route to Highway 101. At present, Caltrans has included signage on Highway 101 recommending trucks divert to Highway 46. For all of these reasons, significant additional traffic volumes on Highway 1 in the Morro Bay area are not expected. As a result, cumulative impacts with MBPP Project traffic are not expected to be significant.

6.11.2.4 Project Design Features

As discussed in the preceding sections, impacts from construction to traffic and transportation will not be significant. This is based on: the short-term duration of peak Stage II construction impacts; Project design features such as off-peak shift scheduling; and the use of preferred access routes.

Further, long-term impacts due to the addition of no new employees at MBPP will be nonexistent and the limited additional deliveries will be insignificant.

6.11.3 MITIGATION MEASURES

Based on the above analysis of impacts and the design and operational features incorporated into the Project, no mitigation measures are required.

6.11.4 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

6.11.4.1 Construction

Based on the analysis above, there will be no significant unavoidable adverse traffic and transportation impacts during construction.

6.11.4.2 Operations

Based on the analysis above, there will be no significant unavoidable adverse traffic and transportation impacts for future MBPP operations.

6.11.5 LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS) COMPLIANCE

The LORS applicable to traffic and transportation are identified in Section 7.5.11. Due to special shift scheduling, designated access routes, development of the Construction Traffic Management Plan, and no increases in the number of permanent employees, the Project will comply with all applicable LORS.

6.11.6 REFERENCES

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